

UNDERSTANDING WATER SUPPLY SANITATION AND HYGIENE (WaSH) IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT AND SUSTAINABLE DEVELOPMENT GOAL SIX

A case study of the role of the European Union as an actor in the
development of Papua New Guinea's (PNG) WaSH sector

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ABSTRACT

Water is central to our ability to lead a life of quality. We require it for most day to day activities, using it for domestic purposes and consumption, growing crops, even recreational activities. Consider now, what impact foregoing access to water, and the services associated with it would have on your life. For many in Papua New Guinea (PNG) this is a reality.

With this in mind, this thesis endeavours to answer the question;

‘In looking at the implications of a lack of WaSH services on the quality of life experienced (as related to health and poverty) in PNG, how has the relationship between the EU and PNG worked to create and enact on policy that addresses these issues in light of the establishment of sustainable development through the SDGs (for further details see Appendix I).’

In using PNG as a case study we intend to show that WaSH has a considerable effect on the quality of life we are able to experience, and that finding solutions to the issues related to WaSH will no doubt lead to improvements to the quality of life experienced by the people of PNG.

ABBREVIATIONS, ACRONYMS AND INITIALISMS

ACP - African, Caribbean, Pacific.

DG DEVCO - Directorate-General for International Cooperation and Development.

ECHO - European Civil Protection and Humanitarian Aid Operations.

EDF - European Development Fund.

EEAS - European External Action Service.

EPA - European Partnership Agreement.

EU - European Union.

GNP - Gross National Product.

HRBA - Human Rights Based Approach.

IFP - Investment Facility for the Pacific.

JMP - Joint Management Programme.

LRRD - Linking Relief, Rehabilitation and Development.

MDGs - Millennium Development Goals.

NEC - National Executive Council.

NGO - Non Governmental Organisation.

NIP - National Indicative Programme.

NSA - Non State Actor.

OECD - Organisation of Economic Cooperation and Development.

OHCHR - UN Office of the High Commissioner for Human Rights.

PMU - Project Management Unit.

PNG - Papua New Guinea.

PNG CPP - PNG Churches Partnership Program.

PRIP - Pacific Regional Indicative Programme.

SDGs - Sustainable Development Goals.

SDG 6 - Sustainable Development Goal 6.

TECCBUF - Technical Cooperation and Capacity Building Capacity.

TEU - Treaty on European Union.

UN - United Nations.

UNHDI - United Nations Human Development Index.

UDHR - Universal Declaration of Human Rights.

UNICEF - United Nations Children's Fund.

WaSH - Water Supply Sanitation and Hygiene.

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INTRODUCTION

Papua New Guinea (PNG) is a Pacific Island nation situated on the Eastern half of the island of New Guinea. With territory spanning many smaller islands and atolls, PNG is the largest island in the Pacific region (Jackson and Standish: 2017). Since gaining independence in 1975 PNG has struggled in its quest to develop, communities are fragmented, inhibited by difficult terrain and a diverse culture comprised of some 800 different languages; as well as being located on the Ring of Fire, making it prone to natural disaster (Jackson and Standish: 2017). All of which have exacerbated issues related to Water Supply, Sanitation and Hygiene (WaSH) in the region.

This has contributed to PNG having some of the worst statistics related to the accessibility of WaSH services both regionally and globally, with only 40% of the population having access to clean water (Hallowell: 2017). PNG has seen little improvements in levels of access to WaSH services since the 1990's, with a mere 6% increase in the number of people with access to clean water, and a 1% decrease in access to sanitation services (Hallowell: 2017). As over 80% of the population of PNG live in remote, rural areas attempts to improve access to WaSH services have been unable to reach the majority of the population. As consequence PNG has struggled with high levels of preventable disease, a lack of knowledge regarding disease prevention and poor levels of access to WaSH services (Hallowell: 2017). From this it is evident that the issues related to WaSH are not limited to water and sanitation, with many foregoing access to services including healthcare (Hallowell: 2017). Perhaps the best way of summarising WaSH in PNG, is that there has been an inability to provide quality services in the quantity needed to meet the demand placed on them (Pacific Community Water, Sanitation Program: 2007).

As mentioned earlier isolation has contributed to struggles in the development of PNG resulting in a lack of knowledge and infrastructure within communities, making them reliant on the assistance of outsider organisations to see progress within their development (ECHO: 2016). The European Commission has sought to provide development assistance to the region focusing on alleviating issues related to WaSH, trade, economics, rural areas and the political struggles affecting the nation. The relationship between these two entities has been based primarily on the Cotonou Agreement which sets the agenda for the EU's interactions with African, Caribbean and Pacific Island (ACP) nations. The rationale for the EU operating in PNG is to work to promote sustainable methods of development, democratic practice and increasing the security of the region against threats posed by climate change (European Commission: 2016).

In understanding the situation in PNG, this research aims to consider the implications a lack of access to WaSH services has had on the lives of those living in PNG, seeking to understand how a lack of access to WaSH inhibits their ability to experience a life of quality.

RESEARCH QUESTION

This research aims to answer the question:

'In looking at the implications of a lack of WaSH services on the quality of life experienced (as related to health and poverty) in PNG, how has the relationship between the EU and PNG worked to create and enact on policy that addresses these issues in light of the establishment of sustainable development through the SDGs (for further details see Appendix I).'

In considering this question this thesis endeavours to answer the following subquestions:

1. How have the SDGs (for further details see Appendix I) sought to frame WaSH in relation to international and national development?
2. What do the SDGs (for further details see Appendix I), particularly SDG 6, (for further details see Appendix II) seek to achieve in global development?
3. How is the EU working to improve access to WaSH in PNG?
4. How does WaSH impact quality of life?
5. What is the role of donors (like the EU) in development?
6. What issues does PNG's 2015-2030 WaSH policy seek to address?

WaSH in the World

There have been tremendous gains in the accessibility of WaSH services since 1990, with a 76% increase in the number of people accessing improved water sources in 2015 and although 663 million people were still without access to improved water, the first time this has fallen below 700 million. Further, only 3 countries have less than 50% of its citizens accessing WaSH services (one being PNG), a significant reduction from 23 in 1990 (World Health Organisation: 2017).

For all the progress made in relation to improving access to WaSH services, globally some 2.1 billion people still forego access to clean water, while 4.5 billion are without adequate sanitation (UN Water: 2017). There are still huge disparities in the coverage of WaSH, with rural areas significantly behind their urban counterparts, as evident in estimates that some 96% of the global population residing in urban have access to clean water, while in rural areas 8 out of 10 people have seen no improvement (World Health Organisation: 2017). In addition there are discrepancies in the ability of people between these regions to access

improved sanitation services, with 82% of urban populations able to access improved levels of sanitation, compared to 51% in rural areas. This means that 7 out of 10 people living in rural areas still forego access to improved sanitation (World Health Organisation: 2017). As well as this of the 5.2 billion people globally that are able to access clean water, only 1.9 billion reside in rural areas (UN Water: 2017).

There has been a 30% rise in the international aid allocated to WaSH services between 2010 and 2012. Showing increased international commitment to ensuring that all people have the ability to access the services that fall under the WaSH umbrella. However in spite of increased funding WaSH still presents a tremendous challenge to be dealt with globally as 748 million people are without access to clean water and other basic services, including soap to facilitate handwashing. No doubt this has an impact on health, as without the ability to practice handwashing there are high rates of diarrhea and other diseases which erupt where WaSH services are lacking (World Health Organisation: 2014).

Globally over 340,000 children die each year as consequence of diarrhea, which occurs due to a lack of WaSH infrastructure. The impact of insufficient access to WaSH services is great, particularly on health. It is suggested that through improving the accessibility of reliable WaSH services there could be a 10% reduction in illness globally. As well as this the WHO anticipates that for every dollar invested into improving access to water and sanitation, there would be a \$4 return through an increased ability of individuals to earn a livelihood (UN Water: 2017).

In the Pacific WaSH issues are considerable. In 2015, it was estimated that just under 7 million people forego access to improved sanitation, while just under 5 million go without access to improved water sources (Reliefweb: 2016). This lack of access is only expected to worsen as consequence of climatic changes (Reliefweb: 2016). Most interestingly is the focus on urban development of WaSH in the Pacific which has resulted in a larger gap in access to WaSH services between rural and urban areas now than there was in the 1990's

(Pacific Community: 2016). Historically the Pacific region has struggled to meet targets for facilitating greater access to WaSH services, as evident when looking at the targets of the MDGs against the achieved results where the Pacific had hoped to achieve 65% of the population accessing sanitation and 73% access to water. In 2015 only 31% of the Pacific population had access to sanitation and 53% for water, with sanitation drastically behind the intended target (Pacific Community: 2016). It will become evident that PNG encapsulates the issues we see in the Pacific, something that will be detailed as this thesis is unfurled.

WaSH in PNG

In 2017 it was estimated that for every 1,000 live births in PNG, 36.3 were stillborn. There are little improvements to these statistics for those that survive birth, with a life expectancy of 67.3 years. Contributing to this is the accessibility of WaSH services throughout PNG. Statistics like the above, combined with global trends in WaSH show not only that access to WaSH services presents a major problem in development, but also that there are huge discrepancies between rural and urban areas. These disparities are more significant when considering that around 90% of the population of PNG resides in rural areas. Statistics like these have contributed to PNG being ranked 156 from 187 countries in the UN's Human Development Index (UNHDI) (Oxfam: 2014. Pg. 2). As this thesis intends to understand WaSH in relation to quality of life, the impact of WaSH on health and poverty in PNG must be addressed.

Health in PNG

The state of health in PNG is dire. Communicable disease runs rife, something exacerbated by a lack of WaSH services which has resulted in poor hygiene practices. PNG has some of

the most damning statistics related to health out of the wider Pacific region, with access to water being worse than that of Sub-Saharan Africa, with access to improved water in PNG sitting around 50%, 10% less than that of Sub-Saharan Africa (Oxfam New Zealand: 2017).

Those in PNG fear worse than most in the Pacific in regards to access to water and sanitation. This is in part due to isolation that leaves communities untouched by public infrastructure with roads not reaching most rural areas Oxfam New Zealand: 2017).

As a result of minimal access to these services, around 900 children every year will die from diarrhea in PNG (Bauai: 2017). It is said that the prevalence of diarrhea could be reduced by 40% if water was treated and stored properly, and disposing of and handling fecal matter properly could reduce instances of diarrhea by at least 30%. As well as this, practicing proper hand washing methods could minimise the risk of spreading disease and diarrhea by 44% (Veronese: 2016. Pg. 8) this furthers the argument that providing better access to WaSH services will be pivotal in seeing improved health outcomes in PNG. Promotion of such things in PNG's national WaSH policy could be vital in reducing the number of those suffering and dying from diarrhea, however this will depend on the continued work of donors alongside government in order to see lasting change in WaSH in PNG (Bauai: 2017).

Figures from PNG fail to depict the disparities in access between rural and urban areas.

Data from the Joint Management Programme (JMP) illustrate this better showing that in 2014 while around 88% of people living in urban areas had access to safe drinking water, in rural areas, only 33% of people had the ability to access clean water. For sanitation, urban areas reportedly had 56% of people with access to adequate levels of sanitation where only 13% of people in rural areas were able to access adequate sanitation.

Although WaSH contributes to many health related issues, perhaps most poignant is the fact that WaSH has been attributed to the resurgence of cholera, which returned to PNG in 2009. Usually cases only occur when the provision of safe water and adequate sanitation is poor and cholera is commonly associated with disaster, where WaSH infrastructure is left in a

state of disarray. However, in PNG the outbreak occurred without disaster. The highest number of cases occurred in areas where poor sanitation and overcrowding was considered normal. WaSH has been linked directly to the outbreak of cholera in PNG, emphasising the fact that access to water is crucial in dealing with health, with evidence that communities with a reticulated water system were left relatively unscathed by the outbreak (Greenhill and Horwood: 2012. Pg. 1).

Poverty in PNG

There are many reasons for poverty in PNG, including the ability to access land, exclusion from a monetised economy, a young population and high rates of youth unemployment and child poverty, as well as an inability to access basic services. Poverty exists all over the country and is not limited to urban settlements, though this is where the greatest disparities between rich and poor is evident. Poverty is obvious when looking at the prevalence of malnourishment, inadequate access to educational and healthcare facilities, a lack of basic infrastructure (e.g. roads), minimal cash paid jobs, and high rates of infant and maternal mortality and low life expectancy (Lowy Institute: 2015). Illustrating the complex and multifaceted nature of poverty.

It is reported that since the mid-1990's PNG has experienced an increased amount of people living in poverty with roughly 37% of the population living on less than USD \$1.25 a day (Oxfam Australia: 2016). This is the highest percentage of people in a Pacific Island country living in poverty. This has contributed to PNG being ranked as one of the lowest performing countries in the UNHDI outside of sub-Saharan Africa. In order for PNG to gain a higher ranking the government will have to deal with the many issues preventing further development. One of the main challenges facing PNG is the prevalence of environmental catastrophe which place greater strain on already limited food and water resources (Oxfam

Australia: 2016). However in spite of poverty being a grave issue in PNG, cases in its extreme form appear to have reduced since 1990, from 4 in every 10 living in poverty, to figures from 2013 suggesting that 1 in 10 people were considered to be living in extreme poverty in PNG (The World Bank: 2011).

Many in PNG believe that because they have the ability to gather food and grow produce they are not in poverty. This is as they have the ability to sell excess produce which allows them to purchase any materials they may need. Most villages in PNG have existed for a long time off of bartering one good for another. Though many rural villagers survive this way, they still forego access to healthcare, electricity and educational opportunities. There are very few people in rural communities that have the ability to teach children and most healthcare facilities are inadequate in dealing with disease and illness. As a result, disease prevention and education are essentially non-existent, and most rural villages have low literacy rates (Arifeae: 2015). As such, in PNG many believe that poverty within the nation is more or less a poverty of opportunity, as around three quarters of PNG's population sustain life through subsistence methods and as a region it is well endowed with natural resources, making this a more accurate description of the situation in PNG (Provencher: 2016).

Poverty needs to be understood as going deeper than being without clothing, food and housing. Though these contribute to it, poverty is also the ability to receive an education, access healthcare services when needed, find employment and experience a quality of life (Arifeae: 2015). Although many groups in PNG believe that poverty simply does not exist because even though there may be a lack of income they can rely on subsistence living (Provencher: 2016), it does not mean that poverty does not exist.

Going forward it must be understood that health and poverty are interconnected issues and both have roots in WaSH.

REVIEW OF LITERATURE AND KEY CONCEPTS

This thesis must utilise lenses to understand how development in the WaSH sector can facilitate progress in the quality of life. In understanding these lenses it will be important to consider how they relate to the key documents that will be used throughout this research, in particular the 2030 Agenda for Sustainable Development and the 2015-2030 WaSH policy. These documents are central to this research as they show how both the international community and PNG have interpreted the ideas within the various concepts of development and how they seek to create change based on these interpretations, understanding that improvements should result in better quality of life experienced by the people of PNG.

Sustainable Development

Generally it can be understood that sustainable development is an attempt to understand whether social, environmental and economic development can occur simultaneously, without encroaching on the ability of the other to successfully take place (Sachs: 2015. Pg. 15). In this sustainable development can be understood in a number of ways. Sach's as a key author in the field of sustainable development states that analytically it can be seen as an attempt to understand why nations struggle to balance the desire to progress economically, develop socially and protect the environment while working to improve the lives of their citizens. However he contends that sustainable development sought to be more than an analytical tool, it intended to provide an ideal for global society to work to achieve. In this sustainable development emphasises the need for the global community to work to eradicate poverty, pursue economic development that benefits all people indiscriminately, all while protecting both society and our environment from the things that threaten their existence (Sachs: 2015. Pg. 15). He further believes that sustainable development sought to orientate

global action towards improving the ability of future generations to live a life of wellbeing. As such this concept focuses on poverty alleviation and promoting equality (Sachs: 2015. Pg. 21) with the intent of eliminating prejudice from global society through creating conditions which allow for greater inclusion of all people within society. Sach's understanding of sustainable development could be considered as being a very human centred approach to development(Sachs: 2015. Pg. 22).

This concept recognises that it is difficult to find a perfect balance between the pursuit of social, economic and environmental ends and that inevitably there will be some trade-offs in its pursuit. Because of this it must be considered whether an action is efficient or equal, and which of the two actors within development aim to work towards. If the intent is to undertake efficient action within sustainable development then the aim is to minimise the waste that occurs as a result of efforts to develop. Whereas if the aim is to undertake equal action, then action must be undertaken that is fair (Sachs: 2015. Pg. 23).

There is a level of idealism within this offshoot of development as it concerns itself with action that is conducive to creating conditions that allow for human flourishing, through the promotion of economic prosperity and eliminating the things that limit the likelihood of this becoming an actuality. The overarching aim of sustainable development is to ensure that any action uses resources wisely and closes the gap between those who have and those who do not - thus reducing the disparities that exist between groups within society. Chapter One will consider sustainable development as a concept in greater depth, however it should be understood that in concerning itself with action that best facilitates human development, sustainable development provides an ambitious set of goals for global development, something that has been developed through the SDGs and sought to be enacted on by actors like the EU, something that will also be considered in later chapters. Whether these are achievable, it is too soon to tell, however it must be kept in mind that though sustainable development is a recent conception, it is not entirely new, and disparities still exist in spite of

its existence. In understanding sustainable development, it will be important to consider the Brundtland Report as a key document to understanding the concept of sustainable development.

The Brundtland Report

The Brundtland Report was released in 1987, creating a new concept within development, that of sustainability. Over the last 30 years it has become one of the most prominent concepts within the field of development being central to the establishment of international goals, most famously the SDGs (for further details see Appendix I). The Report has moulded the international community's understanding of development resulting in a shift in thoughts from one primarily concerned with economic growth, to wanting to see development take place in a way that balances the wish for social, financial and environmental progress (Barlund: 2004).

The Brundtland report defined sustainable development as finding a way to facilitate progress now, that doesn't inhibit the ability of future generations to have their needs met, making clear that long term economic and social progress within development cannot take place if it is done at the expense of the natural environment (Barlund: 2004).

The aspiration of sustainable development through Brundtland is to ensure that our environment has the capacity to meet the needs we have now, while ensuring that these resources will be around for future generations to use (United Nations Commission on Sustainable Development: 2007. Pg. 1). However as a concept sustainable development is still ambiguous and contended. It challenges historical notions of development that have been concerned with economic growth, focusing more on finding an equilibrium between economic, social and environmental growth. Although contended, it seems sustainable development is not fading out of view in international discourse surrounding development,

illustrating the importance of giving weight to social and environmental needs as well as the pursuit of economic progress when considering development.

Sustainable development holds central the idea that humans are a vehicle for their own development and that in pursuing development the environment and the ability of individuals to flourish in their surroundings must be considered, as opposed to just economic indicators of progress.

The Capabilities Approach

The concept of capabilities is orientated around the idea that a country may experience considerable economic growth and still have its citizens experience poor quality of life, illustrating that economic considerations of progress is limited in its capacity to provide us with answers as to whether citizens have the ability to live a life of well being (Sen: 2003. Pg. 42). Sen's conception of capabilities is based on the idea that the best measurement of quality of life is the use of indicators of change within society in order to understand the capacity of individuals to flourish in their lives (Sen: 2003. Pg. 43). This approach understands our lives in terms of two things, 'doings and beings', otherwise called functionings (Sen: 2003. Pg. 43) which can be understood as what an individual is able to achieve within their lives. In understanding functionings and capabilities Sen emphasises the ability of individuals to choose one life over another (Sen: 2003. Pg. 55). Nussbaum intends to build upon this by creating a list of key capabilities in which all people should have in order to lead a life of quality (2002. Pg. 130). In the case of PNG, it ought to be understood that people do not choose to forego access to WaSH services and based on that they are constrained in their ability to pursue many other elements of their lives, they are not free to choose how they live their lives.

Related to the Capabilities Approach is the Human Rights Based Approach (HRBA) which has sought to provide a method in which projects may be implemented so that they consider human rights throughout, in order to ensure that what is put first in efforts to develop is the recognition of our human rights. There are parallels between the two (something which will be discussed later in this research) in their concern with ensuring people are not only treated as an ends to their development, but as a means in facilitating their own access to rights and quality of life.

The HRBA to Development

Following the launch of the UN Programme for Reform in 1997 (UNDG: 2003. Pg. 1), many of the bodies within the UN have sought to implement HRBA into the work they undertake within development. However these bodies have sought to do so in different ways. It seemed that the UN needed to find consensus regarding the implementation of a rights based approach to development. In understanding this the UN established three broad understandings of rights in development.

The first understanding was that all work undertaken within the field of development, from the formulation of policy to the interactions between actors, should be based on the actualising of human rights as related to the Universal Declaration of Human Rights (UDHR). Within this it should be understood that programmes must intentionally orientate their work around the realisation of human rights, with the aim of increasing the accessibility of human rights (UNDG: 2003. Pg. 1).

The second understanding to emerge from the common understanding is that the rights within the UDHR and other international agreements should influence cooperation within development, being integrated into every element of a programme (UNDG: 2003. Pg. 1). Within this it is understood that human rights must be incorporated into every project within

development regardless of whether that project is working towards the eradication of HIV/AIDS, WaSH or other social issues. It emphasises that human rights needs to be incorporated into the global goals as well as other programmes (UNDG: 2003. Pg. 2).

The final understanding within the HRBA is that efforts to development must increase the abilities of those facilitating access to rights and the potential recipients of these rights, so that they may have the ability to access their rights (UNDG: 2003. Pg. 1). Within this the HRBA places human rights as a precondition to the cooperation between facilitators and recipients of aid (UNDG: 2003. Pg. 2). Cooperation ought to work towards increasing the ability of the recipients of rights to take ownership over their rights, working to have them actualised and ensure that those working to facilitate access to rights are fulfilling their duties to increase access to these rights (UNDG: 2003. Pg. 3).

The EU has been an actor that has sought to implement the principles of the HRBA into their approaches within development. In alignment with the idea that human rights should be central to the EU's collective work within development, the notion of HRBA has increasingly directed their partnerships with external countries like PNG, become central to Common Foreign and Security, and development policies, as well as underpinning the actions undertaken within member states (International Human Rights Network. 2008).

The HRBA recognises that development must seek to increase the confidence of individuals in accessing their rights. Programmes ought to target the vulnerable first, with the aim of minimising disparities that exist between them and other groups. Importantly the aim of the HRBA is to identify and solve the root causes of development troubles focusing on tackling them in order to see lasting change within development (UNDG: 2003. Pg. 3).

This research intends to understand WaSH in relation to quality of life and sustainable development within PNG. Because of this it will be important to understand a couple of key

texts in order to sufficiently address WaSH. As this research endeavours to be contemporary, this research will look at the 2030 Agenda for Sustainable Development and PNG's 2015-2030 WaSH policy (for further details see Appendix III). These documents will be central to adequately addressing WaSH, both as a concept and case study.

The 2030 Agenda for Sustainable Development

Central to this thesis is the 2030 Agenda for Sustainable Development. Having been validated by the UN General Assembly after its creation at the UN's Summit for the development of a post-2015 agenda for development (UN: 2015), seeks to provide a list of targets to measure in order to first understand the priorities for WaSH globally, and then how far PNG has to go in order to achieve these targets. The Agenda is important as it sets out the priorities for international development over the next 15 years. It aims to end poverty, understanding that it is the greatest inhibitor to global development and will be integral to success in the pursuit of sustainable development. The SDGs consist of 17 goals with a total of 169 formidable targets that build themselves off of the shortfalls of the MDGs. They prioritise the need to actualise human rights for all, finding an equilibrium in the pursuit of social, economic and environmental progress, as aligned with the concept of sustainable development (United Nations: 2015. Pg. 1).

The 2030 Agenda understands that without immediate intervention poverty and climate change will continue to pose tremendous risks to humanity and will inhibit the ability to enact on the wish to develop sustainably (United Nations: 2015. Pg. 5). The 2030 Agenda recognises that the challenges to development are different depending upon the country and because of that efforts must be made to cater development efforts to deal with the differing needs between regions, providing assistance to fragile and developing countries (United Nations: 2015. Pg. 7).

In understanding what the SDGs (for further details see Appendix I) intend to achieve and how they understand the state of international development this research will focus on Goal 6 of the SDGs (for further details see Appendix II) which relates to WaSH. Goal 6 has the overarching aim of ensuring that all people have the ability to access clean water and adequate sanitation by 2030 and further that this water is affordable and accessible. The goal has the target of ending the practice of open defecation understanding that it is a key contributor to many healthcare issues affecting the world. It seeks to pay attention to the needs of the vulnerable, especially women and children in the pursuit of providing universal access to adequate sanitation. In addition they seek to improve the quality of water, minimising instances of pollution and increasing the practice of water treatment and recycling. As well as this, the goal focuses on ensuring that water sources are effectively managed so to minimise instances of water scarcity globally (United Nations: 2015. Pg. 18). As this thesis continues it will discuss the EU's role in enacting the SDGs (for further details see Appendix I) into their work within development, however it is important that in understanding the SDGs, this research addresses PNG's 2015-2030 WaSH policy (for further details see Appendix III) which seeks to create a path towards achieving the targets of SDG 6 (for further details see Appendix II).

PNG's 2015-2030 WaSH Policy

The WaSH policy was developed by the Task Force, created by PNG's National Executive Council (NEC) (Department of National Planning and Monitoring: 2015. Pg. 5). It intends to show the dedication of the government of PNG to acting in order to improve access to WaSH services in PNG, focusing on equalising distribution between rural and urban areas so to improve the overall quality of life the people of PNG are able to experience. In this policy the government of PNG has prioritised the need to provide better services pertaining

to WaSH as well as changing the behaviours and attitudes of the community. The government recognises that working to improve the WaSH sector will be instrumental in seeing progress in their attempts to pursue sustainable, human-centric development (Department of National Planning and Monitoring: 2015. Pg. i).

The policy represents a shift from what has historically been disorganised attempts to facilitate improved access to WaSH services. In understanding that taking such an uncoordinated approach to WaSH has contributed to the diminished quality of WaSH in PNG, the government, through the WaSH policy, is attempting to find solutions to their inability to keep up with the increased demand placed on WaSH services, assisting the marginalised and minimising the extent to which these people suffer from insufficient access to WaSH services (Department of National Planning and Monitoring: 2015. Pg. i).

The WaSH policy aims to reduce the number of illnesses and death associated with poor water supplies, increase quality of life, and facilitate economic growth through improved healthcare outcomes, as well as emphasising the need to equalise the accessibility of WaSH services between regions (Department of National Planning and Monitoring: 2015. Pg. iii).

These goals will be measured against the targets of the SDGs (for further details see Appendix I). In the implementation of the SDGs, PNG aims to ensure that by 2030, 70% of people residing in rural areas will have access to safe water, while 95% of urban areas will have access to safe water. The policy seeks to prioritise enabling all health centres and schools with adequate access to WaSH services. In regards to sanitation the WaSH policy aims to ensure that 70% of people in rural areas and 85% of people in urban areas have access to improved sanitation services. Again, all healthcare facilities and schools should have complete access to sanitation services by 2030 (Department of National Planning and Monitoring: 2015. Pg. 8). The policy also endeavours to ensure that all schools and healthcare facilities have soap to facilitate hand washing, understanding that this is pivotal in

reducing numbers of people becoming ill from WaSH (Department of National Planning and Monitoring: 2015. Pg. 9).

The targets within this policy is ambitious, however it provides us with evidence that WaSH is an important issue in relation to quality of life for the nation of PNG, a sentiment shared by the SDGs (for further details see Appendix I). In understanding the concepts and key documents this research seeks to address, it is important to look at the methods this research endeavours to use to come to an understanding of WaSH.

METHODS

This thesis intends to understand the impact of WaSH on the quality of life the people of PNG are able to experience, as related to health and poverty. In doing this, this research intends to use the case study method in order to address the impact of WaSH in PNG.

The case study has been applauded for its ability to delineate the reality of complicated issues, seeking to address them in a way that illustrates their ambiguity, providing in depth analysis of contemporary phenomenon (Dudovskiy: 2017). In conducting a qualitative analysis of WaSH in PNG this research intends to utilise the characteristics of the case study. As it endeavours to simplify a complicated phenomenon, the case study provides the best opportunity to sufficiently address the issues relating to WaSH. As the qualitative case study seeks to provide an overview of an entire concept, seeking to understand the issue as a whole (Kohlbacher: 2005). The case study method will be employed in this research so to initially understand the idea of WaSH broadly, through the concepts of sustainable development and the SDGs, before narrowing down to the case of WaSH in PNG.

A case study must have the overarching aim of focusing on a single issue so to provide robust analysis of the issue. In doing this, it seeks to provide answers that influence the actions undertaken within society. The case study ought to continue to be focused, using

information selectively (Shuttleworth: 2008). In understanding that a case study is an approach to research designed to address social phenomena in a way that is targeted and has the ability to provide concise answers, thus simplifying the complex, it can be understood that the intent of the case study is much the same of this research. Both seek to sufficiently address and grasp what are often multi-faceted and ambiguous concepts (Kohlbacher: 2005), in this case the ideas of sustainable development, WaSH and quality of life in PNG.

Having considered the methods this research will employ in its quest to understand WaSH in relation to quality of life, this research should address what it will and will not cover, understanding that there are limitations to the scope of this research.

LIMITATIONS

This research understands that WaSH is a major issue globally. With climate change making this finite source more scarce, this thesis aims to show the centrality of water in our day to day lives and the impact an inability to access these services has on the quality of life people are able to experience. However due to the limited scope of this research, it is important that this research is selective in what it chooses to address in seeking to understand the impact of WaSH on quality of life.

Some 2.3 billion people live without access to a toilet, 844 million go without access to clean water, and some 289,000 children each year will die each year as a result of diarrhea (WaterAid: 2017). It is clear that water affects people indiscriminately, with a third of the world's population live in a state of water stress. This has a great impact on the life they are able to live. It affects the ability of people to earn an income and experience good health results as they are limited in their ability to access sufficient nutrition and health care services (Food for the Hungry: 2016). It is clear that the global community is impacted by a

lack of access to WaSH, and that the issues related to WaSH are not unique to PNG.

However PNG has some of the most damning statistics related to WaSH, health and poverty not only in the Pacific region, but globally.

This research will focus on WaSH in regards to quality of life due to the correlation between WaSH and indicators of good quality of life - these being poverty and health. Although it is understood that quality of life encompasses a plethora of things, this research will focus on health and poverty as primary contributors to quality of life on the premise that they are most commonly associated with a lack of access to WaSH services, and both have a tremendous impact on the quality of life people are able to experience. It is widely accepted that if improvements are made to the accessibility to WaSH services there will be an increased attendance to schools, better opportunities to gain employment, as well as better health outcomes (Water.org: 2017). Illustrating this is the fact that it is anticipated that if we were to be able to provide universal access to clean water there would be a 34% reduction in the number of people dying as consequence of diarrhea (WaterAid: 2017). In this alone it is clear that it is important to focus on WaSH in relation to health and quality of life.

In regards to poverty if WaSH services were more easily accessible communities would have the opportunity to grow out of the impoverished conditions that currently afflict them. This is particularly as in facilitating easier access to WaSH there would be reductions in the time spent collecting and gathering water, so families will be able to spend more time generating an income and thus emerge out of poverty (Water.org: 2017).

The overarching aim of this thesis is to use PNG as a case study to show that the global community must seek to enact on the SDGs (for further details see Appendix I) now, so to see better managed water services in order to ensure that all people are not only able to access WaSH but also have their basic needs met. Due to the narrow scope of this research it has had to be selective in what it has chosen to cover in relation to WaSH and as such

PNG can be seen as a microcosm of WaSH, using it as a case study to illustrate the impact of WaSH on quality of life.

This research will prioritise understanding the concepts of development as related to WaSH. In this it will consider the HRBA and the role of the donors as being key to the implementation of efforts to develop sustainably. It seeks to sufficiently address how WaSH is understood within the international community through the concepts within development and the SDGs, as well as the attitudes of the EU as a key donor to development efforts in PNG. It is important to illustrate that it is understood that WaSH has a much wider scope than this research permits exploration of. This research does not aim to neglect one area of WaSH but rather selectively address the components of WaSH to be dealt with, addressing how it is understood globally before seeking to show the true impact of WaSH on quality of life through the case of PNG. In understanding the limits of this research it is important to outline how this research will be structured.

OUTLINE OF THESIS STRUCTURE

This thesis will follow the structure laid out below;

Before understanding the impact of WaSH, it will be important to find lenses of analysis. In order to do this, Chapter One will explore some of the plethora of concepts that fall under the field of development. This thesis seeks to understand the impact of WaSH on quality of life in relation to the establishment of the SDGs (for further details see Appendix I). This research will use Nussbaum and Sen's conceptions of capabilities in order to understand quality of life independent of economic conceptions of growth. It will then look at the formation of sustainable development through the Brundtland Report, understanding that without that, the SDGs (for further details see Appendix I) may not have come to fruition. It will also be important to address human rights within development, looking at the HRBA as an

implementation tool within development, so to see how rights should be advocated for in order to secure a good quality of life for those living in vulnerable positions, as is the case for the people of PNG. This chapter will then look at the role of donors within development, understanding that the role of the EU in its relationship with PNG is primarily that of a donor. The aim of this chapter is to provide a foundation for this thesis, so that it may be understood how the road to WaSH was paved, from here this thesis intends to analyse the impact of WaSH in relation to quality of life in PNG.

After providing the foundation for how this thesis will seek to understand the issue of WaSH in relation to quality of life and sustainable development, Chapter Two endeavours to take a closer look at the SDGs (for further details see Appendix I) as the current framework that will guide global development through to 2030. In doing this focus will be on Goal 6 of the SDGs (for further details see Appendix II), as this is specific to WaSH. Here it will be important to consider how WaSH is understood through the SDGs, the targets under Goal 6 and briefly the interpretation of the SDGs by the EU. After this, this chapter will look at how SDG 6 relates to WaSH in the Pacific. The aim of this chapter is to understand how global development has increasingly concerned itself with sustainable conceptions of development. Following from Chapter Two, Chapter Three aims to show how the EU conducts work within development. Given that this thesis is focused on WaSH, it will address how the EU understands the state of WaSH globally in relation to its interpretation and implementation of the SDGs (for further details see Appendix I), primarily through the 2016 New Consensus on Development. After looking at this Chapter Three will look into the relationship between the EU, Pacific and PNG, understanding that this primarily takes place within the European Development Fund (EDF). As this research endeavours to be contemporary, mapping the current situation related to WaSH, it will look at the 11th EDF, the allocation of funds towards the development of PNG and the priorities it sets for the relationship between the two entities. Overall, this chapter aims to understand the relationship that exists between the EU

and PNG, what the EU seeks to achieve through this relationship, as well as understanding the attitudes of the EU in undertaking work as a donor within development.

With the previous three chapters building our understanding of the importance of WaSH globally, Chapter Four aims to use PNG as a case study to understand the impact a lack of access to WaSH services has on the quality of life people are able to experience. In understanding this, this chapter seeks to understand the government's attitude towards WaSH. This research will consider how the targets under goal 6 is being addressed by the government of PNG through the 2015-2030 WaSH policy, understanding that it represents the desire of the government of PNG to direct greater attention to WaSH within the nation, understanding that WaSH services will be pivotal in seeing less people live in poverty or with preventable disease. After exploring the policy, this chapter will look at how partnerships are conducted in PNG in order to facilitate improved access to WaSH services, After which Chapter Four will look at the WaSH in schools and health care facilities project which the EU conducts in partnership with United Nations Children's Fund (UNICEF). It should be clear that this project has deliberately aligned itself with the aims of the government of PNG in focusing on enabling complete access to WaSH services in schools and healthcare facilities, as stipulated in the 2015-2030 WaSH Policy (for further details see Appendix III). It further illustrates that improving WaSH will improve conditions relating to health in PNG, and thus improve the overall quality of life experienced by those living in PNG. In considering these things, this chapter aims to show that WaSH has a considerable effect on quality of life and that making improvements to the WaSH sector will no doubt have an impact on the quality of life experienced by those in PNG.

CHAPTER ONE: KEY CONCEPTS

This research aims to explore the implications a lack of access to WaSH services has on the quality of life experienced in PNG. This is in light of the establishment of SDG 6 which has brought to the fore the importance of water in the process of development. In order to do this it will be important to have analytical lenses so to understand the issues related to WaSH.

This is where an understanding of the concepts within the field of development is important.

This research will utilise sustainable conceptions of development and capability approaches in order to understand the impact of WaSH on quality of life in PNG. This chapter will also focus on implementation tools within development, namely the role of donors and HRBAs to development, as related to the work undertaken by the EU in PNG. This thesis aim to examine how sustainable development, as a key conceptual framework underpinning both the SDGs (for further details see Appendix I) and the EU's actions within development. This chapter also aims to examine the capabilities approach as a framework in which the freedoms the people of PNG have in choosing how they go about their day to day lives without the ability to access WaSH services can be measured.

In using these concepts, this research aims to look beyond traditional considerations of PNG's development instead focusing on how increasing the coverage of WaSH services may seek to improve the quality of life experienced by citizens, through reducing the impact of poverty and poor health on the Pacific Island nation.

THE RISE OF DEVELOPMENT PARADIGMS

Generally it is understood that development seeks to address the complexities of balancing social, political and economic matters, while transforming our understanding of

environmental issues (Monks et al. 2016). The idea of development gained traction throughout the 1900's against rapid technological, scientific and economic growth. Initially development was understood to cover improvements to conditions that would allow all individuals to be resilient against change, while retaining the ability to establish new goals for their lives (Du Pisani: 2007).

In the 1950's the idea emerged that in order to create lasting growth in the economy wealth would have to be shared evenly across the global community. This came to fruition in the 30 years later with the decline of the modernisation paradigm, which perceived economic growth as a way to alleviate poverty and regression in economic development (Hove: 2004. Pg. 49). This came as the international community no longer saw this as a solution to the growing number of people living in conditions of poverty. As our understanding of development has shifted through the changing of dominant development paradigms, there has been increased awareness that development cannot take place if there isn't a focus on human rights (Hove: 2004. Pg. 49).

The 21st century saw the international community move from the conception of developed versus developing and concern with economic growth, to the idea of human life being central to development. In this it was understood that seeing people live in conditions where they may flourish provides us with the best opportunity to experience lasting development (United Nations Development Programme: 2015). This belief is based on understanding that focusing on economic growth doesn't necessarily ensure that all people will be able to experience improved opportunities in life. This focus is aligned with Sen's conception of capabilities which focuses on providing the tools to enable all people the ability to live the life they desire. Again economic growth is placed second to providing opportunities for human development (United Nations Development Programme: 2015). In this the international community has increasingly focused on the need to preserve life, eradicate poverty and provide the conditions in which all people are empowered to work to achieve a better quality

of life. These ideas have become the guiding principles within the SDGs (United Nations Sustainable Development Platform: 2015).

In understanding the rise of development theory it can be understood as a broad concept with many different connotations depending upon the lens you wish to look through. As the lenses of analysis in this thesis, focus will be placed on how the capabilities approach interrelates with HRBAs to development.

THE CAPABILITIES APPROACH

Sen first conceived the concept of capabilities in 1979, expanding on it throughout the 1980's (Alkire, S. 2011. Pg. 4). The overarching aim of this concept is to create conditions that allow individuals to experience a greater variety of freedoms, so that they may lead a fulfilling life. This is known as 'development of freedom' (Sen: 1999. Pg. 5). Capabilities approaches prioritise the need to live a life of well being, and the ability of individuals to choose how they go about their day to day lives. The capabilities approach believe that any input into the development process must emphasise the need for individuals to have dominion over their own lives. Nussbaum herself states that the role of governments in development is to give individuals the ability to express their opinions, but that they must decide for themselves whether or not they will utilise this. This illustrates that underpinning the capabilities approach is understanding the ability of individuals to choose how they go about their lives, ensuring that governments create conditions that allow them the ability to choose (Anand, Hunter and Smith: 2005. Pg. 13).

The capabilities approach has shifted emphasis within development from helping countries that have historically been in need to assisting individuals out of impoverished conditions. This has seen a rise in 'global ethics', creating unity between individuals for the sake of helping those living in the worst situations of poverty as opposed to focusing solely on

national development. The global community has become more concerned with helping members of the global community through the provision of aid for the sake of providing relief, so to allow the most vulnerable pockets of society to have the ability to access their basic rights (Fukuda-Parr: 2011. Pg. 126). There is a prioritisation of establishing rights over providing economic goods. Empowering individuals over providing handouts.

Sen's Formation of the Capabilities Approach

The capabilities approach was formulated by Amartya Sen. This approach considers life as a set of functionings which that can be examined so to provide insight into the quality of life people are able to experience. The principles of this approach are founded in the works of Karl Marx, Adam Smith and Aristotle (Sen: 2003. Pg. 43). For Sen, a functioning denotes what an individual is able to achieve, while a capability can generally be understood as a combination of these functionings. They are the 'doing and beings' that people are able to undertake in their lives. Put simply it is the ability of an individual to choose how they live their lives. Central to this research is the fact that this approach is more concerned with the quality of life and understanding the well being experienced by individuals than it is with economic measurements placed over an individual's well being (Sen: 2003. Pg. 44). The idea of development as related to Sen encompasses many overlapping notions, ones concerned with human rights, good governance, multiculturalism and the global community (Goulet: 2006. Pg. 118), ideas that are echoed in the HRBA and actions undertaken by the EU in its quest to assist in development.

Sen's formulation of the capabilities approach has emerged from welfare economics which understood well being in terms of income and happiness. Taking initial cues from Smith, Sen believes that income growth is important in seeing the development of human life, however he then moves towards Aristotelian thought stating that economic wealth isn't the end result,

rather it facilitates our ability to reach the end we are looking for. Sen believes that focus should be placed on evaluating the extent to which people have the capacity to lead their lives by understanding what an individual can achieve in the environment they inhabit. This requires an understanding that even if all people were provided with the same income, they would still have different abilities to turn this sum into an achievement (Clark: 2006. Pg. 33). As such Sen believed there is no correlation between quality of life and Gross National Product (GNP), stating that even countries that have a relatively high GNP can still see citizens possess a fairly low quality of life. For Sen quality of life can be measured in terms of literacy rates, instances of early death and the numbers of people experiencing preventable diseases. From this is the idea that an income provides us with little more than the opportunity to improve our lives, it is a means, and even then it is insufficient in providing people with satisfaction or a sense of fulfillment in their lives. Increasing wealth simply isn't enough to provide people with the ability to pursue their individual needs and aspirations (Sen: 2003. Pg. 42).

Sen has continued to build on the capabilities approach, denoting a number of key freedoms which lead to increased capabilities. These include political freedoms, social and economic opportunities, security and assurances of transparency. He has been critiqued by Nussbaum for being too broad in his conception of capabilities, something she seeks to remedy through the creation of key capabilities. Overall, the capabilities approach believes that the core aim of development is building human capabilities instead of focusing on growing the economy, because though it is required for development to take place, it isn't always enough (Clark: 2006. Pg. 40).

Nussbaum's Conception of Key Capabilities

Nussbaum sought to clarify Sen's capabilities approach by listing specific capabilities all people ought to retain. Nussbaum writes that the capabilities approach can be seen as an evaluation of the quality of life experienced by individuals in terms of the distribution of opportunities and wealth within society. Central to this approach is finding out what an individual is able to be and do within their society. In this Nussbaum focuses on understanding that people have the ability to make choices in how they go about living their lives (Keleher: 2014. Pg. 63). Simply put, the capabilities approach perceives an individual as an ends to themselves. The approach doesn't look at the overall well being experienced by an individual, focusing instead on the options available to them. Key to this is the idea that individuals are free to make choices regarding how they go about their day to day lives. She holds firm that governments should be advocating for a set of central freedoms to be enjoyed by all individuals, and that ultimately people should be able to choose whether or not they exercise them (Nussbaum: 2011. Pg. 18), a sentiment shared by Sen. Nussbaum aims to elaborate on Sen's conception of capabilities, denoting a list of core capabilities which all people should possess. Sen didn't believe it necessary to confine the approach to a number of core capabilities, thinking of this as being constraining more than useful. Nussbaum's list of central capabilities include having the ability to live a long life of quality and experience good health; in this Nussbaum prioritises nutrition, shelter and reproductive health (Nussbaum: 2002. Pg. 130). In creating a list of key capabilities Nussbaum attempts to create a tangible set of capabilities that can be used to understand the quality of life experienced by individuals. She believes that a denial of any of these is a denial of their fundamental freedoms. For this research some of these conceptions will be more important than others, primarily the idea of quality of life and being healthy. Though no doubt the

others are important, these are more aligned with our focus on the pervasive nature a lack of WaSH services has on health and poverty in PNG.

The HRBA and the Capabilities Approach

The capabilities approach is harmonious to HRBAs to development (D'Hollander, Marx and Wouters: 2013. Pg. 9). Both human rights and capabilities approaches are concerned with the freedom and respect given to human beings. They understand the complex nature of human life and both have similar priorities in creating development policy. Both believe policy ought to be focused on reducing inequalities, alleviating poverty, ensuring our basic needs are met, as well as making sure that good governance is practiced, taking measures to make sure that accountability exists within the government system. These are regarded as central issues to be dealt with in efforts to develop by the HRBA and capabilities approaches (Fukuda-Parr: 2011. Pg. 75). This research endeavours to focus on these points understanding that dealing with issues related to WaSH will directly affect quality of life through reducing the prevalence poverty and health care issues that plague the region.

The capabilities approach is concerned with inequalities in the scope of capabilities, it is here that it must be evaluated why inequalities exist and orientate policy towards dealing with the unfair allocation of resources, addressing why pockets of society go without. Capabilities is less concerned with inequality in terms of income (Fukuda-Parr: 2011. Pg. 76) concerning itself primarily with increasing the capabilities individuals are able to experience.

Moreover, both have reimagined development orientating it around concern for human development (Beke, D'Hollander, Pollet: 2013. Pg. 8). They perceive development as realising that even the vulnerable are capable of realising their own rights and working towards changing the conditions they live in, in order to ensure that they may have their needs met. Both approaches emphasise the need to orientate development around the

needs of those who are set to benefit from projects. Both emphasise the importance of empowering individuals to ensure that they work to have their basic needs met (Beke, D'Hollander and Pollet: 2013. Pg. 9).

THE HRBA TO DEVELOPMENT

The HRBA framework was established in 2003 (UNDG: 2016) and has sought to incorporate human rights to every facet of development. Projects incorporating the HRBA framework ought to have the overarching goal of facilitating greater recognition of rights, seeking to ensure that they dictate the work undertaken within projects, whilst working to alleviate instances of poverty (UNDP: 2003. Pg. 2). It is emphasised that all projects should be conducted based on core principles within rights discourse. These being the notion of the universality rights, the cross-sectoral, interconnected nature of them and that they should apply to all people equally, with all people included in the process of having their rights met (UNDP: 2003. Pg. 2). There is a dual focus on those needing to have access to rights and those facilitating increased access to rights, both of which require enhanced capacity to provide and receive rights, while attempting to understand the things that leave people continuing to live in impoverished conditions, so to minimise the effect of poverty within these regions (UNDP: 2003. Pg. 3).

The goal of implementing projects under the HRBA will be to see those within developing communities participating for their own development (UNDP: 2003. Pg. 3). Within this it can be understood that taking a HRBA to development requires an understanding of our basic rights and the need for them to be met, as well as the reasons why they have yet to be realised (UNDP: 2003. Pg. 3). Projects that seek to take on the HRBA will realise that those targeted as benefactors of projects should be treated as being central to facilitating their own development and not simply as beneficiaries of assistance, they should be involved in efforts

to develop and ought to be given the confidence to continue in their quest to develop. The rights based approach seeks to mobilise those from vulnerable regions to assert their rights, whilst ensuring that those working within development advocate for the protection of these rights (Isoh: 2013). Donors can assist in doing this by placing pre-conditions to receiving aid, whilst governments can focus on reforming policy and behaviours. It appears that a degree of liability is important in development as it enables the recognition of human rights as a precondition to seeing change in developing regions (D'Hollander, Marx and Wouters. 2013: Pg. 42).

The right to develop under the UN's HRBA framework can be applauded for shifting the focus of development from being considered an act of charity to a matter of justice, realising the fundamentality of rights and the need to have them met. However, it must also be considered whether this is actually being done. There has been critique that the HRBA to development has been based on the premise of change. The critique is that it is often indirect and as a result doesn't face contestation. Change is often perceived as being either social or organisational. Within this, organisational change assumes that organisations will take a HRBA to development and implement it in their actions. It neglects the fact that in seeking to implement the HRBA to their own development efforts, organisations will have to establish new policy orientated around the ideas of the HRBA which is often met with opposition by those working within organisations. In this it has been considered more of a legal process than one orientated around societal and economic change. In focusing on social change, it is neglected that in order to spark societal level change the demands between acted must be balanced. The two are linked, something that isn't always considered. This is as social change is often dependent upon organisations, their attitudes and visions regarding alterations to society (Gready and Vandenhoe: 2014. Pg. 292). As the results of development efforts are increasingly given greater attention, emphasis is placed on understanding how action result in certain outcomes. As rights discourse is

concerned primarily with creating change to society, it is not as easy to make a clear distinction between actions and outcomes. In focusing on results, it is clear that those acting in the field of development and human rights seek to approach the idea of creating change differently. In this human rights has focused primarily on the legal framework surrounding the recognition of rights, whilst actors in development have sought to base their actions around what can be observed. In this there is the contention of human rights as a normative approach and development actors that prioritise changing the things what can be seen - the realities in which we live. This is seemingly ideological, with development actors and the ideas within the HRBA coming from two different standpoints (Gready and Vandenhoe: 2014. Pg. 310). As such development actors have prioritised economic growth and the implementation of achievable targets - based on realities such as health, within the likes of the SDGs (for further details see Appendix I) over the implementation of frameworks like the HRBA.

The HRBA is the most extensive effort to incorporate human rights into development efforts, seeking to ensure that all actors understand that they are responsible for ensuring that human rights are respected and upheld. However though the aim has been to ensure that efforts are made to prioritise rights within development, there have been few attempts to solidify how the HRBA should be practiced. There is no real understanding on how to undertake development in a way that incorporates human rights or evaluates whether rights are being realised within development projects. Based on this the UN Office of the High Commissioner for Human Rights (OHCHR) has stated that the best way to understand the HRBA is as a guide for development that seeks to give a normative foundation to humanitarian development, based on the wish to recognise the human rights written in international agreements; basing action on the need to advocate for recognition and access to these rights. Further, the HRBA could be better understood as seeking to address the disparities in access to rights. However the HRBA is still yet to be truly operational being

more accurately considered a conception of development as opposed to a practical framework for the implementation of development efforts (Beke, D'Hollander and Pollet: 2013. Pg. 6).

LINKING THE CONCEPTS OF (SUSTAINABLE) DEVELOPMENT AND THE CAPABILITIES APPROACH

It can be said that the capabilities approach is an offshoot of development theory. Sen, as the central figure to this approach, has been instrumental in shifting our conception of development. He allowed us to understand that simply looking at economic considerations of development is not enough to create an accurate picture of the quality of life experienced by those living in developing regions (Barder: 2012). As with Sen, sustainable development has increasingly sought to understand that well being should not be associated primarily with economic development, that we cannot just improve economic conditions in order to increase the well being of the vulnerable. To see development take place it must also be considered how actors work together in matters related to the economic, political and social spheres of life. These interactions must enable all persons to experience a good quality of life (Barder: 2012).

The variety of approaches within development, from HRBA to sustainable development centre on the idea that what ought to be emphasised in development is that individuals have rights and that the core aim of any project within the field of development is to provide the conditions for all human rights to be met. Though worded in different ways, both hold the same key premise, that in intervening for the sake of development, the basic needs of all individuals ought to be addressed.

THE IDEA OF SUSTAINABLE DEVELOPMENT

Sustainable development came to the fore through the 1987 Brundtland Commission report 'Our Common Future' (Brundtland Commission: 1987). It brought to the fore the idea of developing in a way that puts first the collective good and not the interests of a select few. In recognising that development is about improving quality of life it seeks to put constraints on any growth that infringes upon that. Sustainable development seeks to facilitate communication between actors so to set agendas that deal with the most pressing needs related to development. Increasingly this requires focusing on the need to ensure that all people are able to access their basic rights. Actors must accept that all those working in the field of sustainable development are responsible for ensuring that efforts to develop take place in a way that caters to the social and environmental needs of developing regions, and that projects will address the different needs and aspirations of regions, while understanding the inherent worth of the natural environment (Baker. 2016: Pg. 428). Generally it can be understood that sustainable development seeks to create an environment that is conducive to economic growth, enables greater participation within development, protects natural resources and ensures that all actors within development practice good governance (Sachs: 2015. Pg. 16).

Sustainable development is an ambitious concept, seeking to transform how all actors undertake development, prioritising action that is conducive to sustained economic growth, social inclusion and the protection of our natural environment. This idea is clear in the SDGs (for further details see Appendix I) which seek to take the concept of sustainable development, re-working its principles into a cohesive document that sets out how the international community ought to undertake development with the intent of improving living conditions for not only our generation, but future generations too.

Chapter Two seeks to show that the establishment of the SDGs (for further details see Appendix I) have sought to put into practice the ideas within sustainable development. They are guided by the idea that no one should live in conditions of poverty, that all people should be well nourished, educated, and live without having to worry about illness or violence. It emphasises that all people should have equal access to the services that enable us to live a life of quality, this includes healthcare (United Nations Sustainable Development Platform: 2015). The SDGs which are a UNDP effort to enact upon the principles of sustainable development are guided by the idea that all people are entitled to basic services, including water and sanitation, and that the international community needs to work to ensure all people can utilise this right. The intent of the SDGs is to re-work the ideas behind the likes of the 1987 Brundtland Report, so to maximise well being by facilitating access to the basic services needed to ensure all people are well nourished, sheltered, literate and free from illness (United Nations Sustainable Development Platform: 2015).

The Rise of Sustainable Development through the Brundtland Report

Sustainable development is orientated around the idea that the actions taken in regards to investing, developing or extracting resources should be done in a way that enables not only the needs of the current generation, but also the needs of future generations to be met. The 1987 Brundtland Report was integral to debunking the notion that preservation of the environment can only occur if potential economic development is sacrificed (Baker. 2016: Pg. 32). Brundtland has held the notion that central to development is allowing the basic needs of individuals to be met. Evidently there needs to be greater efforts made in order for this to become an actuality, as many still forego access to the basics of life, including water and shelter, illustrated by the PNG case. The report further suggests that development ought to facilitate more than just meeting these basic needs and should seek to improve quality of

life (Baker. 2016: Pg. 45). Within this, sustainable development can be seen as battling the need to meet the demands placed on natural resources now, without impeding on the ability of future generations to meet their needs too (Sachs: 2015. Pg. 17).

The Brundtland report was critical in formulating our understanding of sustainability. The report took the idea of development, traditionally considered an economic and social term, and sustainability, a term typically concerned with the physical world around us, putting them together filling a gap in our conception of development by considering the fact that development should also give thought to the need to preserve the environment in which we live. This spun on its head previous ideas that dealing with the environment was mostly a matter of protection rather than development. Brundtland further brought to the fore the idea that the way in which states interact impacts the ability of communities to act sustainably (Baker. 2016: Pg. 24).

Pearce adds to Baker's argument stating that the Brundtland Report introduced two central ideas within sustainable development. The first being the idea of needing to realise the needs of those living in the poorest regions globally and the importance of addressing these needs, whilst allowing for their rights to be met. Second was the notion that there needs to be constraints placed upon technological advancement in order to ensure that the resources exist to meet the needs the international community has not only now, but in the future. He states that it was not an accident that the Brundtland Report uses the word 'need', it is intended to show that those living in poverty forego access to the basics we accept as a given, including ready access to clean water, civil rights, access to health and shelter (Pearce: 2006. Pg. 616) again illustrated in the case of PNG.

Sustainable Development Following on from Brundtland

As with many issues in development, there are many possible interpretations of what sustainability means, resulting in an ambiguous and complex concept. Perhaps sustainable development best illustrates this when it is considered that for those concerned with environmental issues, the efforts of governments to implement measures of promoting sustainable development have appeared to be little more than surface level environmentalism, while others accuse government's use of sustainable development as an excuse rather than a propellant for increased action towards developing in a way that is sustainable. The main critiques of sustainable development in the wake of the 1992 Rio conference were based on claims that it was too environmentally charged and didn't consider the social and economic foundations of development (Bärlund: 2004).

In light of this it has been said that the political interpretation of sustainable development depends largely on the ability of a country to deal with pervasive social issues, while the economic side has been integrated into sustainable development as a whole, rather than existing as some off shoot to sustainable development. The greatest difficulty appears to come in attempting to determine the social sphere of sustainable development. This is as there is a lack of consensus as to what it is meant by the idea of the social sphere, as it can be challenging to measure social phenomena (Bärlund: 2004).

As sustainable development continued to gain traction throughout the 1990's, many felt that it was lacking, seeking to do too much without any underlying framework to facilitate its achievement. Many believed that the broad conception of sustainable development has given governments a cover in which they can pursue economic development under the veil of working towards the protection of natural resources, neglecting the intent of sustainable development, which is the prioritisation of environmental protection and working for the betterment of society (Hove: 2004. Pg. 51). The ambiguity of sustainable development has

led to the suggestion that sustainable development is simply an idealistic vision for how the world should be, without providing any blueprint as to how to get there. Essentially, proponents to sustainable development have understood it as a blurry concept at best, providing no set ideological standpoint or guideline to facilitate development, focusing instead on an ideal that has no plan for achievement (Hove: 2004. Pg. 52).

The 2002 Johannesburg Summit on Sustainable Development showed that there was still a commitment at the political level towards sustainable development, although the novelty and excitement of the concept appeared to be subsiding. The summit saw a transition from focusing on sustainable development as an entire concept, to targeting specific strands of development. Johannesburg highlighted the idea that universal implementation of global goals would prove to be too inflexible and better results would be yielded in allowing for regional interpretation of these goals. The aim was to find practical ways of enacting the aspirations of the global goals in the field (Bärlund: 2004). This idea has flourished within the SDGs (for further details see Appendix I), where although the aim is global achievement, it is expected that nations will seek to rework the agenda so it may fit in with their national and regional frameworks, and the most pressing needs of those living within their nations borders.

In the ambiguity of sustainable development, academics and experts alike seem to draw the conclusion that perhaps the best conception of sustainable development was that of Brundtland (Emas: 2015. Pg. 1), that its apparent ambiguity exists because there is no way of finding a more specific definition of sustainable development. But more than that, the conception of sustainable development that emerged from Brundtland doesn't seek to narrow the focus of sustainable development (Emas: 2015. Pg. 2) understanding that as an issue sustainable development epitomises the fact that matters in politics are often complex and diverse. Essentially, it can be understood that sustainable development seeks to facilitate economic growth, whilst stressing the fact that while pursuing economic

development, the need to work towards greater social cohesion and the protection of our natural resources must be addressed, with the overarching aim of allowing society to enjoy continued prosperity not only now but in the future too (Sachs: 2015. Pg. 17).

DONORS AND DEVELOPMENT

Donors increasingly place the promotion of rights as a precondition to forming partnerships and making efforts to reduce the number of those living in impoverished conditions (D'Hollander, Marx and Wouters. 2013: Pg. 9). Donors like the EU have worked to put human rights at the forefront of their negotiations with developing countries. This is illustrated by the Cotonou Agreement which provides a forum by which the EU facilitates discussion between donors and recipients in order to address human rights issues in ACP nations (D'Hollander, Marx and Wouters. 2013: Pg. 23). This can be seen in the relationship between the EU and PNG where human rights agendas are increasingly being incorporated into EDF frameworks, something that will be considered in more depth in Chapter Three. Donating agencies must seek to implement projects that reach those with the greatest needs. This is in part due to the necessity of utilising funding in order to maximise outputs, but also out of the need to ensure that projects are seeking to create change for the most vulnerable, a core aim within the HRBA to development. In PNG this would mean targeting rural communities which have both the majority of the population living there and the least amount of people with access to WaSH services. In recognising the fragility of these communities, donors must be determined to create positive change in the lives of the vulnerable, in spite of the challenges they will come across in facilitating progress in isolated, disconnected and often rural communities. In doing this donors recognise that focusing on areas with the greatest need has the best likelihood of resulting in effective projects.

In the implementation of projects, aid can be provided in a number of ways. A donor can either support a project, this aid usually goes to the private sector or a civil society organisation. Or a donor will provide funding to a government in order to boost their national budgets, this often serves to assist countries in implementing policy which seeks to facilitate the more effective provision of services. There are two main ways in which aid is provided by donors, this is either budget support or project modality (European Commission: 2017). The aim of providing aid directly to a government is to increase government ownership over development efforts. In this support is directed towards the creation of national strategies that deal with an issue affecting a region (European Commission: 2017) this can be seen through the EU's assistance with the WaSH 2015-2030 policy in PNG. The European Commission seeks to create change within sectors of development by facilitating change that places national governments in control over the policy and financing of development. This is project modality and is used with the intent of ensuring consistency in where funds are directed, resources are placed and the outcomes of these projects (European Commission: 2017). For the Commission this is important as it provides a way in which national, regional and community level policy within a sector (like WaSH) can be streamlined, ensuring that all levels receive sufficient funding and resources in order to ensure that results emerge from the implementation of these policies (European Commission: 2017).

Project modality can be understood as the methods in which projects are undertaken in order to be effectively implemented. Within this projects should denote the main stakeholders and the people they seek to target as the main benefactors of the project, there should be a monitoring system in place in order to measure the outcomes of the project. Management is another focus within the modalities of projects. This process seeks to ensure that the actions undertaken in a project are relevant and abide by the agreed upon frameworks for project implementation. In this projects must seek to resolve the key

problems facing the target group and have objectives that are achievable within the region, even with the continued challenges that face organisations in the pursuit of development (European Commission: 2017).

As a donor, the European Commission will provide sectoral policy support in order to ensure that policy has clear guidelines for action and provides direction as to what the policy seeks to achieve, how it intends to do so, how it will be implemented, the expected results and how these results will be measured. The assistance also aims to ensure that budgets are realistic and that there is a sufficient level of coordination between the various donors. This should be led by the government of the nation where work is being conducted (European Commission: 2017).

The role of the donor is to do more than provide financial support to projects, they must also work to ensure that there are the appropriate checks and balances in place, so that projects are monitored and delivered to a high standard, something that has thus far been lacking in PNG. Monitoring is important in ensuring that projects have the capacity to create the most change, as donors are able to measure the holistic achievements of the projects they fund and from that establish the best way in which they can proceed in providing future support to their partners (EPAR: 2016). This is as donor agencies should have the information in front of them in order to make informed decisions before intervening within a region, so that resources are allocated in an efficient manner. This is important as funding is notoriously hard to come by in the NGO sector (Kreidler: 1999).

Donors must make sure that other donors are holding themselves accountable, undertaking a sort of 'self-check' amongst groups to ensure that all those donating funds toward humanitarian causes know that they are responsible for the progress made in development. It is emphasised that donors to humanitarian causes work as a collective in order to ensure that attention is given to those in the most need, and further that projects are of the quality needed to spark change within developing countries (Kreidler: 1999).

Donors have an important role in regards to human rights. As the HRBA illustrates, donors are important actors in ensuring that any project implemented has the promotion of rights at the core of their projects (Kreidler: 1999), this idea, though controversial, is important as it emphasises the need to ensure that human rights are prioritised as attempts are made to facilitate development. In this it can be seen that in efforts to develop it is understood that it is fundamental that donors seek to ensure the longevity of the outcomes that come from their projects, that they seek to create change that can last after donor support is gone. In order to do this it is stressed that donors must focus on addressing the inequalities that exist in order to see progress in global development efforts. Both donors and the recipients of aid must aim to work in alignment with the objectives set forth in international agreements based on ensuring equality and the provision of human rights. This is perceived as an effort by donors to standardise human rights discourse into the work undertaken by donors in development (Beke, D'Hollander, Pollet: 2013. Pg. 10). However, it should also be considered that although the aspiration of the HRBA and donors is to implement projects that have the aim of allowing for the recognition of the rights of all people, it doesn't always take place. Oftentimes other matters like economic growth and the implementation of efforts aimed at the realisation of the targets of the SDGs (for further details see Appendix I) are prioritised over efforts to take a HRBA to development (Beke, D'Hollander, Pollet: 2013. Pg. 14).

Donors have yet to fully incorporate an HRBA approach to their projects. Bodies like the World Bank have stated that they do not believe they need to take an HRBA to development as donors already undertake actions conducive to the recognition of rights, it does not have to be stated in order for it to be understood that their work has the aim of increasing the accessibility of human rights (Beke, D'Hollander, Pollet: 2013. Pg. 19). Other donors believe that rights are independent to their work within development and is not within the scope of their projects. On the other hand many donors have sought to take on an HRBA to

development but haven't always had the ability to do so, which has led to the claim that the implementation of the HRBA to development can be considered a surface level achievement in which a new term used but no results are yielded (Beke, D'Hollander, Pollet: 2013. Pg. 19). The view of donors towards the HRBA is complex. Some regard the idea of the HRBA as being overtly political and thus not relevant to their projects, while others see the HRBA as placing limitations on the flexibility they enjoy in their work within development. The biggest critique of the HRBA has been that there is no system within the HRBA to measure the progress made in pursuing a HRBA to development (Beke, D'Hollander, Pollet: 2013. Pg. 20).

The role of the donor is fundamental in development. Their role is not simply to provide aid, but to ensure that all actors are held accountable in advocating for and promoting the fundamentality of human rights in development. They often act as a connector between government and other actors in order to ensure that all those working within the field of humanitarian development seek to promote action that best facilitates improved quality of life for those living in the most vulnerable conditions globally. In this it is understood that though the aspirations of donors may differ, they all have the overarching aim of providing assistance in order to improve the quality of life and well being experienced by all people (Kopinak: 2013).

These concepts are important in this research as they are concerned with the interdependence of human rights, the ability to measure quality of life and well being independent to considerations of wealth, whilst seeking to promote the fundamentality of universal access to basic rights so that all people may have their core needs met. Development has created a path in which the SDGs have been created, an agenda that although contested, has sought to put sustainable development at the forefront of international negotiations. Further, the international community has increasingly understood

that looking at the spread of wealth alone is insufficient in understanding the ability of individuals to experience a good quality of life, that you can have a country with a good GNP that still faces grave issues in regards to the well being experienced by its citizens. Sen's capabilities approach has reinforced these ideas, seeking to emphasise the importance of empowering individuals to work to have their needs addressed, and the need for governments to work to ensure that all people retain the ability to choose the way in which they go about their day to day lives.

The capabilities approach and the different conceptions of development can be seen as running parallel to each other, prioritising rights and basic needs in order to see the improvement of living conditions in some of the most vulnerable regions. As a field, development has been fundamental in establishing a set of goals that has worked towards seeing progress in global development. The subfields of the HRBA, the role of donors and the idea of sustainable development are integral to the creation of the SDGs (for further details see Appendix I), as such they are important for this research as it aims to analyse matters related to WaSH in PNG. They are also significant as they detail the motivation of the EU to intervene in the affairs of PNG in matters related to WaSH. Through this it can be seen how the EU seeks to approach their relationship with PNG, and further how they will interact through their wish to work in a manner that is conducive to the HRBA to development. The EU has echoed many of the messages within sustainable development through their motivation to pursue partnerships that are based on the need to recognise not only the needs of the most vulnerable now, but the needs of future generations, working to reduce the likelihood of people living in similar conditions of depravity in the future.

CHAPTER TWO: THE SDGs IN RELATION TO WATER AND WaSH

This chapter will briefly examine what the SDGs(for further details see Appendix I) are and then look more closely how they are aligned with WaSH and the issues pertaining to development, as this is the key issue to be addressed in this thesis. This research aims to understand that access to WaSH services is central to not only the success of the global goals but also in ensuring that all people can experience a good quality of life, a message at the heart of the SDGs.

For this research it will also be important to understand the role of the global goals, primarily SDG 6 (for further details see Appendix II) (relating to water and sanitation) in the progression of development. Goal 6 will be the focus of this chapter as it will be used as a frame to understand WaSH in PNG, where it can be established what PNG needs to address in order to meet the targets of not only this goal, but the 2015-2030 WaSH policy. To do this, this research must first provide a background to the SDGs (for further details see Appendix I), in this the MDGs and academic views on the SDGs will be considered. After which this chapter must explain what SDG 6 is, the relationship between this goal and WaSH, the issues it seeks to address and the targets it sets for the international community, in order to see improvements to the state of water globally. After this, this research will look at how the SDGs relate to the plethora of issues regarding WaSH in the Pacific.

BACKGROUND TO THE SDGs

The MDGs

The MDGs came to fruition following multiple UN conferences aimed at addressing the impacts of issues related to health and equality in the 1990's. The establishment of the MDGs took place with little debate, being based on the creation of global goals by the Organisation of Economic Cooperation and Development (OECD) in 1996 (Sengupta: 2016). The MDGs were criticised by NGO groups who believed that they were formulated by academic elites, without the involvement of the not for profit sector as such they were regarded as being 'undemocratic' (Sengupta: 2016). Further NGOs were not only skeptical because the MDGs were formulated outside of public view, they believed the MDGs to be lacking in focus, neglecting normative values like the idea of good governance, and environmental matters like climate change (McArthur: 2013. Pg. 155). Because of this when it became time to establish a new set of goals to take the place of the MDGs, it was considered more important to create an open forum in which new goals could be considered. This led to a panel that decided the tone for the post-2015 agenda would focus on sustainable development, where the MDGs had emphasises human centred development (Sengupta: 2016), further there was a prioritisation of sustainable methods of development, focusing on the three pillars of development noted in the Brundtland report (Sengupta: 2016).

The MDGs have been praised for having facilitated increased discussion between political and non state actors (NSAs), resulting in greater global commitment towards development (Fukuda-Parr: 2011. Pg 127), however as with the SDGs, they have faced criticism. The MDGs conceptualised development in a way that no longer limited itself to economic considerations of growth, facilitating a transition to development efforts that were centred

around quality of life and poverty eradication (Fukuda-Parr: 2011. Pg 129). Sen's desire to look at the conditions we live in and from that address whether that environment is conducive to individual growth can be seen in the MDGs. It is clear that those living in poverty are unable to take steps towards living the lives they desire, something that is integral to understanding quality of life through Sen's capabilities approach. Fukuda-Parr writes that the MDGs emphasised the necessity of meeting the basic needs of all people, understanding that the vulnerable often forego access to the essentials of life, severely limiting their capacity to lead a life of quality (Fukuda-Parr: 2004. Pg. 396). This is entrenched in the ideas of capabilities which has prioritised addressing the fundamental needs of individuals in the pursuit of development above solely improving the economic environment within a region (Fukuda-Parr: 2004. Pg. 396).

The MDGs also sought to increase our comprehension of convoluted ideas like poverty, using controversial indicators related to health and literacy they attempted to show that there were pockets of society unaffected by the development efforts of the time, illustrating the extent to which developing countries were struggling to improve living conditions for their most vulnerable (Fukuda-Parr: 2011. Pg 130). They aimed to do so through the creation of specific targets that sought to address what McArthur calls neglected issues (2013. Pg. 152) centering on the reduction of poverty, promotion of education and improvement of the state of health, particularly in developing countries (McArthur: 2013. Pg. 154). Khor suggests that the MDGs were more or less thrust upon nations by UN institutions and research experts (2012: Pg. 12). Because of this nations were ill prepared for working towards meeting the targets of the MDGs, which was illustrated as estimates of progress within developing countries insinuated that many would be unable to reach their targets, with the least progress being made in countries that needed it most. From this came the realisation that in order to meet the targets of the MDGs, efforts would have to be made to either increase growth or establish measurements of progress independent to economic growth, focusing

more on social indicators of development. This has strengthened an idea present in Sen's capabilities approach, that focusing solely on economic growth has led to little improvements to the conditions the world's most vulnerable live in, and as such is insufficient in and of itself to deal with the complexities of poverty (White: 2006. Pg. 388), emphasising the need to establish conditions through efforts to develop wherein people are able to experience growth in the capabilities they can experience (Fukuda-Parr. 2004: Pg. 396).

As the MDGs came to a close, the international community felt as though they did not sufficiently address matters related to sustainability, rights or the disparities that exist within the international community. Because of this emphasis was placed on creating a new set of goals that sought to put first the fundamentality of sustainable development, rights and reducing global inequalities in order to see lasting change in the international community. From here came the rise of the SDGs (UNWater: 2015).

Further, where the MDGs offered targets focused primarily on achievement by developing countries with the assistance of development countries, the SDGs have emphasised the need to orientate goals for international achievement, applying to all countries equally. The focus is no longer on what developed countries ought to do to assist developing countries, but instead on what the global community can do in order to ensure the next generation have the resources needed in order to flourish (Sachs: 2012. Pg. 2208).

Compared to the MDGs which aimed to orientate goals around targets that could easily be measured, the SDGs grapple with more complex and ambiguous ideas, leading to concern that in basing themselves on the ideas within sustainable development, that of sustainability and inclusive growth they are creating targets that cannot be actualised as it is based on an at best misty concept (Sengupta: 2016). In attempting to increase the likelihood of achievement, where the MDGs offered targets that left developing countries starting at a disadvantaged point, the SDGs have established goals that ought to be achieved globally. Whilst it is envisioned that nations will take the targets of the SDGs and incorporate them

into national agenda setting, the goals are intended for global fulfillment (Fukuda-Parr: 2016. Pg. 49). However there is potential that in spite of the aspirational nature of the SDGs, the idea of nations deciding how best to implement them could lead to these progressive goals falling short in their implementation. This could mean that though the intent of the SDGs is to eradicate poverty, nations may neglect dealing with the root causes of poverty opting instead to tackle easier targets; diluting the overarching aim of the SDGs and leaving those living in the most impoverished conditions unaffected by development efforts (Fukuda-Parr: 2016. Pg. 50).

These global goals recognise the need to facilitate greater engagement between all stakeholders in development, ensuring that there is accountability over the efforts taken to develop. They have understood the necessity of creating conditions in which individuals may have the capacity to thrive. This has been done by recognising that rights are universal and that no one should go without access to them, understanding that the vulnerable are still human beings and have a right to a life of dignity and respect. The goals understood that in development efforts cannot cater solely to the needs we have today, efforts must seek to forecast the needs of future generations and preserve the resources required to have those needs met.

Arguments For and Against the SDGs

The SDGs (for further details see Appendix I) have conceptual roots in sustainable development. Following from the MDGs, they sought to place the notion of sustainable development at the fore of development discourse. This followed twenty years of discussion surrounding the need to find an equilibrium between the wish to pursue social and economic development and the need to protect the environment. This turned on its head how the international community discussed development, emphasising the somewhat ambiguous notion of sustainability within development (Arhin, Kumi,Yeboah: 2013. Pg. 540).

As the SDGs (for further details see Appendix I) become entrenched in global development action, it is set to become the core document dictating the path we follow in our pursuit of global development over the next fifteen years (Arhin, Kumi,Yeboah: 2013. Pg. 540).

Because of this it must be considered that in having roots in a disputed concept - that of sustainable development, are the SDGs basing itself on a solid frame? Seeing as sustainable development has faced critique, offering what has been considered an oversimplified discussion of the interactions between social, economic and environmental endeavours in the pursuit of growth, could the SDGs (for further details see Appendix I) be misguided in seeking to base itself off of this concept (Arhin, Kumi,Yeboah: 2013. Pg. 544)? When it is considered that in spite of the existence of sustainable development, disparities both within and between countries are continuing to grow, with greater risks associated with climate change, economic slumps, job insecurity and growing inequalities in access to health and education, it is clear that the ideas of sustainable development are more valuable now than they were at the time of Brundtland (Arhin, Kumi,Yeboah: 2013. Pg. 547) however it is unclear whether these have the capacity to be more than aspirations.

The SDGs (for further details see Appendix I) have faced criticism not dissimilar to that of sustainable development. It is suggested that there is still no real thrust to find definitive answers as to what efforts to develop should result in, nor is there enough consideration of the societies that exist today. In light of this, Moore suggests that what we ought to focus on as we move forward with the SDGs is creating prosperous conditions through development efforts. In this she is less concerned with economic considerations of prosperity, echoing Sen's ideas of development as she emphasises the need to create conditions that will result in all people having the ability to thrive in society, prioritising the protection of rights (Moore: 2015. Pg. 803). As the SDGs are primarily about the provision of services needed for human flourishing (Moore: 2015. Pg. 811), they place the actions we take as the drivers of sustained change in efforts to develop. In this, the SDGs provide avenues in which people can be

central to their own development, they can in essence be both a means and an ends to their own development again a message we see within capabilities and HRBAs to development (Moore: 2015. Pg. 811).

A key critique of the SDGs have come from the Bill and Melinda Gates Foundation which has said that global goals ought to follow the SMART measure, meaning that they should be Specific, Measurable, Attainable, Relevant and Timebound and easily conveyed. In this the critique is that the SDGs are not SMART, that due to the immense targets they seek to achieve, they offer more confusion than use, particularly when compared to the minimal targets within the MDGs (Sridhar: 2016. Pg. 1453). Based on this, Sridhar suggests that the best we can do is agree that at best the SDGs are imprecise, difficult to measure, with no certainties that they are actually achievable. However, even with criticism, Sridhar suggests that there is no doubt that the SDGs are both relevant to dealing with the issues facing the global communities, and have achieved something huge in and of itself in managing to pool together both resources and manpower in creating one document aimed at facilitating international development (Sridhar: 2016. Pg. 1454).

The SDGs (for further details see Appendix I) endeavour to deal with the most pressing issues related to our ability to develop, that being the deterioration of our natural environment and the prevalence of global poverty. The notion of sustainable development understands that these problems are exacerbated when attempts are made to deal with both matters separately, it requires that the international community takes action that combines development efforts with environmental protection so to improve quality of life for both the present and future generations (Cheever and Dernbach: 2015. Pg. 249).

Sachs emphasises that the SDGs come at a critical time where the global community is facing some of the most pressing challenges to progress within development. That in a time where the effects of climate change are being realised, populations continue to grow at unprecedented pace, the SDGs are crucial in creating common consensus as to how to work

to minimise the potential grievances caused by these challenges. He understands that the issues we face now requires behavioural changes and continued actions by future generations as well as our own (Sachs: 2015. Pg. 20). He is optimistic about both sustainable conceptions of development and the SDGs, believing that they have provided a forum in which we may seek to resolve the issues related to global development and emphasise collective action in attempts to address the needs within society, the needs that all humanity have regardless of their background (Sachs: 2015. Pg. 23).

In order to understand the SDGs (for further details see Appendix I), we must understand that the achievement of one depends upon the ability of the global community to meet the targets of another. However, though this is how the goals ought to work, there has been no clarity as to how this is so. The issue here lies in the fact that more often than not government will focus less on the difficult discussions pertaining to the SDGs, that being what will be prioritised as they seek to implement the SDGs (Griggs, Nilsson and Visbeck: 2016. Pg. 320).

The 2030 Agenda as accepted by the UN General Assembly following the UN Sustainable Development Summit of 2015 (UN: 2015) so easily gained traction within international discussion surrounding development as there was increased recognition of the need to develop sustainably. Though there are different understandings of sustainable development, as established in the previous chapter, most conceptions prioritise working to ensure the promotion of well being is central to development efforts. They focus on doing so through facilitating economic growth, ensuring the protection of natural resources, and greater community participation within development (Sachs: 2012. Pg. 2206). However there is also the realisation that communities will seek to embark on the pursuit of sustainable development differently. There is no common ground on what will be prioritised in efforts to develop sustainably, the environment, society or the economy. Yet, in spite of this, the SDGs like sustainable development seek to provide a broad understanding of the need to focus on

all three factors in the pursuit of development, an understanding for the international community to build efforts to develop on (Sachs: 2012. Pg. 2206).

The SDGs (for further details see Appendix I) represent the fact that the international community understands that there is a correlation between the deterioration of natural resources and increased inequality (Moore: 2015. Pg. 803). Because of this it can be concluded that the 2030 Agenda must seek to comprehend the fact that quality of life is dependent on the ability to manage natural resources. It holds central that sustainable development is at its roots about the ability to ensure the continuation of human life, not just the pursuit of economic, social and environmental growth. Because of this, the SDGs and principles of sustainable development will not be accomplished without considering the needs and actions of those living in states of depravity. They must seek to provide a forum in which the needs of those living in poverty will be heard and prioritise the need to focus on equalising the distribution of resources (Arhin, Kumi, Yeboah: 2013. Pg. 548).

THE SDGs AND WaSH (SDG 6)

Water and the SDGs

Water is understood as being integral to the ability to not only survive but develop. The ability to access water is key to the ability to minimise the impact of disease, promote well being, and increasing the ability of communities to withstand the effects of climate change. Increasingly, the global community has come to understand that water is not infinite, that the ability of this resource to last depends entirely on our ability to effectively manage the use of it. It could be said that water will be central to the making or breaking of the SDGs (for further details see Appendix I), if steps are taken to effectively manage water resources it could be pivotal in preparing communities for the unforecastable effects of climate change, if not it

could exacerbate these changes, leaving people in increased states of vulnerability (UNWater: 2015).

Dealing with the issues related to WaSH will be central to seeing the success of the SDGs as it provides a base for many of the other goals within the agenda (UN: 2016. Pg. 2). This is as water is a feature in more than just goal 6 of the SDGs (for further details see Appendix II). Goal 3 is focused on improving global health seeks to eradicate outbreaks of water-related diseases as well as diseases including HIV/AIDS which is exacerbated by water. This goal also endeavours to minimise the extent to which people suffer from diseases related polluted water. Further, in Goal 11 which seeks to create sustainable cities, there is the target of lessening the number of people affected by natural disaster, in which water related disaster is emphasised (UN: 2015). Goal 12 which focuses on ensuring that all people use resources responsibly has the target of better managing the use of chemicals so to minimise the extent to which they are released into the natural environment (UN: 2015). As well as this, Goal 15 which is focused on the land endeavours to ensure that ecosystems are protected and used in accordance with the stipulations of international agreements. The goal also aims to minimise the damage caused by invasive species on water bodies (UN: 2015). In understanding the fact that water is dotted throughout the SDGs, it is important to look more closely at SDG 6 (for further details see Appendix II) and the targets it sets for international achievement by 2030.

Globally it is becoming more and more recognised that water is central to the success of all targets of the 2030 Agenda, not just goal 6. This is as water is understood as interconnecting many of the global goals, particularly those related to food security and environmental matters. It is suggested that no longer can we deal with water independently from the other goals, that the achievement of SDG 6 can only be achieved if we work towards achieving the other targets of the SDGs, and vice versa (Ait-Kadi: 2015. Pg: 107).

Further, there is consensus that the ability to access WaSH services is paramount to the ability to live a life of quality, with it being connected to the ability to experience good health and access education and generally live a life in which people are treated with dignity and respect. It is understood that those living in states of depravity are unable to access WaSH services and will generally lack the behaviours needed to practice proper hygiene. It will be important that the SDGs (for further details see Appendix I) seek to improve WaSH services in order to facilitate development and work to eradicate poverty, core messages behind the SDGs (Chase and Hutton: 2016. Pg. 1).

The SDGs have attempted to deal with the 750 million people who have foregone any improvements in the accessibility of clean drinking water and the 1.8 billion people drinking water contaminated with fecal matter (Bhaduri: 2016. Pg. 2). The prevalence of water, not only in SDG 6, but also in the targets of other goals (for further details see Appendix I), including goals 3 and 11, show the fundamentality of water in the progression of development (Bhaduri: 2016. Pg. 2). In this it is clear that the international community recognises that it is vital increased efforts are made to ensure that water resources will be available for the next generation. This is off of the back of deteriorating water quality which has impacted both the environment and human life, impacting the state of health in areas that are unable to access sufficient WaSH services. Further propelling efforts to target water through the SDGs (for further details see Appendix I) is the understanding that more and more the issues related to water is not so much that of quantity, but the declining quality of the water supplies available (Bhaduri: 2016. Pg. 3). Water appears to be the interlinking factor of the SDGs with an inability to achieve the targets related to water, the other goals within the 2030 Agenda will struggle to be met. Addressing the issues related to water will affect other goals as water quality has an impact on health outcomes, meaning improvements to water will no doubt have an effect on the ability of the global community to meet the targets of Goal 3 (Bhaduri: 2016. Pg. 7).

It is important to understand that in the pursuit of sustainable development, compromises will have to be made. As the SDGs (for further details see Appendix I) align their intent with that of the capabilities approach, they seek to prioritise development efforts so that they work to ensure that all people, not only now, but in the future retain the ability to live a life of well being (Dorwood and Unterhalter. 2013: Pg. 619), nations will have to choose to take action that best addresses the needs of citizens. In this responsibility is placed on governments to ensure that when requirements for resources outweigh the supplies available, the available resources are allocated responsibly, resolve tensions that arise from the need to allocate resources. Most importantly, governments must ensure that water resources are shared equally amongst citizens, that access is equitable (Ait-Kadi: 2015. Pg: 109). It can be seen through the increased focus on water in the SDGs, that the international community realises that the ability to live with access to WaSH services provides people with the ability to live comfortably and with dignity (Chase and Hutton: 2016. Pg. 10).

In addressing SDG 6 (for further details see Appendix II) it will be important to consider that the fact that a goal focused primarily on addressing the issues related to water shows that the global community recognises the fundamentality of water within human development. Within goal 6 are targets related to ensuring that water exists for consumption and sanitation as well as for ensuring environmental sustainability. Further, it seeks to address the issues related to water as they unravel. This is as water continues to contribute to issues related to sanitation and deteriorating delivery of WaSH services (Bhaduri: 2016. Pg. 11).

SDG 6

Water and sanitation have a great impact on the health of people with limited access to it. Preventable diseases related to water and sanitation, like diarrhea result in the death of 1,000 children each day (UNDP: 2017). This has a considerable impact on the ability of

individuals to lead a life of quality. Without access to sufficient supplies of water people are unable to lead a life in which they can flourish. Lempert writes that goals like SDG 6 (for further details see Appendix II), though a goal in and of itself will work to achieve the overarching goal to put an end to global poverty (2017: Pg. 123). This is based on the idea that reverses the intent of the SDGs, that of poverty alleviation being central to working to create sustainability in development, instead Lempert perceives sustainable methods of development as being the only way to work to eradicate poverty (2017: Pg. 124). Water is a key contributor to poverty and health, dealing with WaSH will be critical to seeing reductions in poverty, growth in the economy, and the achievement of overall environmental sustainability, as well as quality of life more generally (UNDP: 2016. Pg. 4). People with access to water and sanitation services are able to lead dignified lives as WaSH services provide people with food security, a source of energy and good physical and environmental health, whilst those without access are left in states of increased vulnerability to illness and poverty (UNDP: 2016. Pg. 4). This is illustrated in PNG which experiences high rates of disease as consequence of inadequate access to WaSH services, severely restricting their ability to improve their lives. Without access to safe water, people are severely limited in their capacity to lead a life in which they may flourish (UNDP: 2016. Pg. 4).

The primary goal of SDG 6 (for further details see Appendix II) is to ensure that all people have the ability to access safe water, emphasis is placed on the availability of clean drinking water. Further it intends to promote hygiene practices ensuring that all people have the capacity to access the sanitation services needed to practice proper hygiene methods, including hand washing and ending the practice of open defecation (United Nations: 2015). The difficulty in achieving SDG 6 will come primarily from the deterioration of WaSH delivery infrastructure, here it will be important that work towards achieving the targets of this goal seek to ensure that facilities that deliver WaSH services are sufficiently maintained. This is as often times the facilities are poorly maintained, while demand increases. In seeking to

create lasting change to the state of WaSH another challenge will be related to behaviours practiced as related to hygiene, highlighted here is the ability to practice handwashing with soap (Chase and Hutton: 2016. Pg. 23).

Bustero writes that the SDGs (for further details see Appendix I) welcome the HRBA to development as being conducive to ensuring that human rights are prioritised in efforts to develop (2015: Pg. 12) this is important when considering water as a human right. Taking on an HRBA in efforts to meet the targets of SDG 6 will enable the various organisations working to meet the targets of goal 6 to effectively pinpoint the key issues affecting different regions in their attempts to alleviate the suffering caused by inequalities (Bustreo: 2015: Pg.12) this includes a lack of access to WaSH services. As the HRBA is a contentious idea, one would have to be careful in ensuring that in taking on an HRBA approach to meeting the targets of the SDGs (for further details see Appendix I) they ensure that focus is equally on the importance of water as a resource that is managed effectively can assist in alleviating poverty and not solely on the idea of water as a right conducive to allowing for poverty eradication (Schmitz. 2012: Pg. 525).

As SDG 6 (for further details see Appendix II) requires the international community to deal with the various issues related to water, the targets within this goal relate not only to the provision of safe drinking water. It also requires that water sources are allocated fairly and managed wisely, as well as seeking to meet somewhat formidable targets related to universal access to WaSH services including putting an end to the practice of open defecation. This goal has the core aim of ensuring that all people are able to access WaSH services with the hope that this will reduce the disparities that exist globally, focusing on vulnerable pockets of society, namely women and children (Chase and Hutton: 2016. Pg. 3). SDG 6 prioritises the provision of water to all members of the global community. It highlights the importance of water in our daily lives and the impact insufficient access to water has on the state of health and poverty within a region. It will now be important to understand how

PNG has sought to tackle the issue of WaSH through the creation of the 2015-2030 WaSH policy.

THE CASE FOR WaSH IN THE PACIFIC

In understanding the SDGs (for further details see Appendix I) it ought to be considered how neighbouring countries cooperate with the goal of developing regionally. The Pacific Plan was created with the intent of working to integrate the Pacific region so that they may work collectively in order to promote the sustainable management of resources (Pacific Islands Forum Secretariat: 2017). This plan guided regional cooperation between the Pacific Island states for the period of 2005-2014, it emphasised the fact that these small Islands would achieve more working collectively than they would attempting to pursue development as individuals, holding at its core the desire to develop the Pacific region so that all regions may experience a good quality of life through creating conditions of peace and economic security through the promotion of sustainable conceptions of development (Pacific Islands Forum Secretariat: 2017). As such, the Pacific Plan had four core ideas that guided regional cooperation. These were the desire to develop sustainably, promote good governance, as well as growing the economy and increasing the security of the region. The Plan broadened its purview, particularly in the field of sustainability increasingly seeking to deal with the issues likely to plague the Pacific region, that being the increasing effects of global warming as well as the need to continue to work to improve the quality of life Pacific Islanders have the ability to experience. The need to extend the focus of the Pacific Plan led to the creation of five additional goals with 37 sub-targets (Pacific Islands Forum Secretariat: 2017). The Pacific Plan was ultimately replaced by the Framework for Pacific Regionalism. Focusing on integration has been undertaken by the Pacific region with the intent of promoting

sustainable development within the Pacific and overcoming the challenges commonly affecting these countries (Pacific Islands Forum Secretariat: 2014. Pg. 1). This plan has the objective of making efforts to develop that are sustainable, focusing on the three pillars of sustainable development, with the overall aim of increasing the quality of life experienced by those living in the Pacific (Pacific Islands Forum Secretariat: 2014. Pg. 3), echoing the Pacific Plan.

The SDGs (for further details see Appendix I), like the MDGs have put the eradication of poverty at the heart of global efforts to develop. They have aimed to change our perceptions of development and the ways in which the international community seeks to address the issues related to development, focusing on working as a global collective over and above the promotion of national interest. The MDGs created a short and coherent set of goals which sought to provide tangible evidence of development through the use of statistics and measures of progress. In contrast, the SDGs seek to focus on the somewhat ambiguous notions of sustainability and poverty, attempting to coordinate development efforts that not only improve the quality of life experienced by all people, but also create lasting change that ensures that the resources exist to cater to not only the needs have now, but the needs of future generations too.

In line with development theories the SDGs (for further details see Appendix I) have broadened our conception of development, increasingly relating it to quality of life, understanding the importance of meeting the basic needs of all persons globally. Emphasis is placed on providing the conditions in which those in the most deprived living situations into positions have both the capacity to flourish and recognition of their human rights, when previously evidence of progress was based primarily on economic indicators of growth. Here it is clear that there are links between Sen's capabilities approach through the advocacy on the part of the SDGs to create conditions which allow individuals the ability to thrive in their

communities, understanding that there are limitations to how the likes of GDP can illustrate the ability of individuals to live a life of wellbeing (Sen: 2005. Pg. 159).

The SDGs (for further details see Appendix I) have shown that WaSH is important not only in and of itself but also in improving other sectors of development, including poverty and health care. It could be suggested that WaSH is key to the ability to see success in the achievement of all of the targets of the SDGs, as it is a cross cutting issue. This is as the ability to access water and sanitation influences results in health, the ability to access education, earn a livelihood and live with dignity and respect. When this research looks deeper into WaSH in PNG it will be clear that inadequate access to WaSH services is incredibly detrimental to the lives of those in PNG, resulting in vulnerable and isolated rural communities.

This chapter has briefly considered the relationship between the EU and the SDGs (for further details see Appendix I). The next chapter will illustrate that the EU has sought to coordinate the priorities of the SDGs with their own frameworks, as evident in the 2016 Consensus on Development. This has reshaped the EU's engagement with states like PNG, with more deliberate efforts being made to tackle issues related to the achievement of the SDGs, including the prioritisation of increasing access to WaSH services in PNG. It will become clearer that the EU aspires to be a key entity in making a success of the SDGs, noticing many parallels between the motivation of the EU in its work in development, and the key ideas behind the SDGs. Further it will be clear that the EU advocates for a rights based approach to development, working as both an advisor in policy and donor in its relationship with PNG. In the next chapter it will be important to understand how seriously the EU takes its role within the international community in promoting sustainable development, particularly as it is one of the key donors within the field of development.

CHAPTER THREE: THE EU AS AN ACTOR IN DEVELOPMENT

The various institutions within the EU, from member states to the European External Action Service (EEAS) and DG DEVCO are major actors in the provision of international development aid. The 2016 Consensus on Development illustrates the EU's desire to ensure that these institutions work together to take collective action that works towards not only improving the quality of life experienced by individuals, but also increased recognition of the importance of environmental conservation and good management over resources, in alignment with the SDGs (for further details see Appendix I) (European Commission: 2017. Pg. 3). As established in the previous chapters, these ideas are echoed in both the concept of sustainable development and the global goals. This document shows that the various cogs in the EU machine have set themselves ambitious goals for their work within development, ones that are complicated by the challenges that they face in working with the unique issues nations like PNG face in their quest for development, something that will be discussed in Chapter Four.

This chapter aims to look first at the EU's interpretation of the SDGs (for further details see Appendix I) and sustainable development, primarily through the 2016 Consensus on Development (European Commission: 2017). It will then address how the various institutions of the EU address issues related to WaSH under the umbrella of the SDGs, before considering the relationship between the EU, the Pacific Region and the government of PNG, in particular focusing on the priorities for their relationship under the 11th EDF which sets out the allocation of funds for the 2014 - 2020 period. Ultimately the aim of this chapter is to understand how the institutions of the EU reconcile their work as donors in the field of development in order to take collective action that works in alignment with the 2030 Agenda.

CLARIFYING THE ROLES OF EU INSTITUTIONS

This thesis will look at the role of the European Commission, the EEAS and DG DEVCO as some of the primary actors within EU development in the international arena, understanding that in implementing development policy, the EU has many different actors. The European Commission manages the instruments of aid as funded by the EU budget, this includes the EDF which is technically not a part of the EU budget. Further the Commission is responsible for organising European donor groups to ensure that the work they do is executed in tandem with that of other EU actions in development (Bodenstein: 2017. Pg. 444). In comparison, the EEAS works within the political landscape of development, establishing who will get what from EU aid and the most pressing matters to be dealt with through these funds (Bodenstein: 2017. Pg. 444). DG DEVCO works through the delegations of the EU in creating and enacting development programmes (Bodenstein: 2017. Pg. 444). Overseeing this is the European Parliament who signs off on finance and development directives, as well as evaluating the work of the Commission and EEAS (Bodenstein: 2017. Pg. 444). Not surprisingly, the way that the EU operates within the field of development has been considered convoluted (Bodenstein: 2017. Pg. 444).

The EU, Sustainable Development and SDGs

In 2016 discussions began around the need to effectively communicate the new development agenda. This was led by Neven Mimica (European Commission: 2018) who emphasised the importance of increasing interaction between the EU and their partners so that efforts can be made to collectively achieve the SDGs (European Commission: 2018). Though the EU has aimed to be a central figure in global development discourse, their previous focus on undertaking activities that worked to develop the green economy wasn't

met with universal agreeance (Khor: 2012. Pg. 12). The EU had suggested that the UN create specific targets that work towards the achievement of a global green economy, the EU focused specifically on the need to prioritise management of water and other agricultural resources (Khor: 2012. Pg. 13). However, Khor contends that though the aim of the EU through the advocacy of the green economy was to establish conditions that would allow for the promotion of normative values and the notions within sustainable development, it was met with reluctance from developing countries who believed the EU was taking steps too far in their wish to promote the use of the green economy (2012: Pg. 13). Brito echoed such sentiments stating that the concept of the green economy provided a dreary offering to international development, and that the idea of the SDGs (for further details see Appendix I) sparked the lightbulb moment that had the potential to create traction within development discourse in the international community (Bruto: 2012. Pg.1396). Based on this, the EU, as stated earlier, has increasingly focused on incorporating the messages of the SDGs into their actions within the global community. At the root of their work with developing countries is a focus on capacity building, so that vulnerable communities may be better equipped at dealing with the effects of social, economic and climate change, as evident in the new Consensus on Development (European Commission: 2017).

As an actor in international development, the EU has been seen as both as a source of development funding and a marketplace for developing countries to work and build itself within (Bodenstein: 2017. Pg. 442). In occupying themselves with the SDGs (for further details see Appendix I), the EU has only added more to their already zealous development policies in order to be successful in their work within development, Bodenstein states that the EU should consider how to implement the goals within their own borders and within the international community (Bodenstein: 2017. Pg. 447). In incorporating the ideals of sustainable development Wysokinska writes that the policies of the EU aims to see a reduction in the prevalence of poverty, ensure that the EU is orientating action towards

dealing with pervasive issues to development - including hunger, while working towards key environmental concerns including water management (2011. Pg. 30). He further holds central the wish of the EU to place sustainable development at the centre of all policies within the EU and member states (Wysokinska. 2011. Pg. 36).

At the EU level, the Commission has opted to work alongside the European Parliament in order to implement the global goals into EU frameworks. In this, they have focused on increasing the likelihood of long term results emerging from the SDGs (for further details see Appendix I), focusing on the post 2020 period, directing their budget towards facilitating the achievement of the long term objectives of the SDGs. The goal is to implement and meet all of the targets of the SDGs, creating sustainable long term changes in the pursuit of development (European Commission: 2017). This not only illustrates the complex nature of the work of the EU as a body of various institutions within development (Bodenstein: 2017. Pg. 444) but also of the fundamentality of pursuing sustainable development.

However there are risks in the EU seeking to base its work within development off of the back of the SDGs (for further details see Appendix I). This is as the SDGs, though providing goals for achievement, has offered no suggestions as to the root causes these problems, let alone the problems that these goals seek to address (Lempert. 2017: Pg. 123). Further, the SDGs though emphasising the interconnectivity of the goals, have provided no way to deal with these goals as cross-sectoral issues to be dealt with in global development, if anything they appear to identify issues rather than offer ways to solve them (Lempert. 2017: Pg. 126). As such the EU must work to find the links between these issues prior to dealing with them, as well as keeping in mind their role as a donor to development efforts.

In considering the role the institutions of the EU plays in regards to sustainable development, this chapter must consider the various policies and frameworks the EU employs in order to conduct work within development.

The EU's Consideration of WaSH

The European Commission was the largest donor of aid to the WaSH sector in 2016, providing over €150 million towards humanitarian WaSH causes, roughly a quarter of the total global funding allocated to the WaSH sector for that year. In ten years funding to WaSH has increased thirty-fold, however dependency has also grown, meaning there is still insufficient funding to cater to the growing demand placed on WaSH services. As consequence of a lack of access to basic WaSH facilities over 1.7 million people die annually. Of that, 3,000 children die each day as consequence of waterborne disease (European Commission: 2017. Pg. 1). This makes aid invaluable. In response to growing WaSH needs, the European Commission has increasingly incorporated WaSH into their other development targets so to maximise their efforts in facilitating improved access to WaSH services. For example WaSH has been combined with nutrition programmes so to increase the reach of their work within the sector. It is important that the EU works to address the issues related to insufficient access to WaSH, especially as the effects of climate change, urbanisation and population growth are creating greater strain on the provision of already limited WaSH resources. In understanding that the demand for WaSH services is only increasing and that the various players within the EU are actively working to ensure that they can deal with WaSH related issues quickly and cohesively with the intent of protecting vulnerable persons (European Commission: 2017. Pg. 1).

In regards to SDG 6 (for further details see Appendix II), the EU aims to support developing countries through bilateral and regional programmes. They focus on meeting the targets of SDG 6 namely providing clean drinking water and adequate sanitation services, whilst dealing with water pollution and mismanagement of water resources (European Commission: 2017). The commitment of the EU to implement the SDGs into their internal and external actions is made clear in the 2016 Consensus on Development.

It is clear that WaSH is an important issue to the EU, one they seek to address by recognising the extent to which water is affected by climate change and the impact this then has on the health and wellbeing of vulnerable persons. As funding is limited emphasis must be placed on the efficient use of the resources the institutions of the EU provides towards development efforts in order to maximise the ability of their projects to target those with the greatest needs.

The Cotonou Agreement

The Cotonou Agreement, like previous agreements of the EU build itself off of the platform created by Global Goals, meaning that the success of these agreements are reliant upon the ability of the EU to meet the targets of these goals (Flint: 2009. Pg. 85). Evidence of this first appeared in the Treaty on European Union (TEU) which was signed in 1992 and placed emphasis on four key pursuits in the EU's work within development. This included the alleviation of poverty, stimulating economic growth, particularly in rural areas, and advocating for the promotion of human rights and sustainability (Flint: 2009. Pg. 85).

Cotonou is no exception to this, like the TEU, Cotonou and interaction between the EU and Pacific bloc more generally is entrenched in the notion of working to develop in a matter conducive to sustainability, in this the EU has emphasised the need to focus aid on specific countries and causes in order to maximise the effectiveness of their work (Flint: 2009. Pg. 85). Hurt states that the EU's actions within development, primarily with ACP and Mediterranean countries has standardised, all being based on three key pursuits, that of providing assistance in development, increased political discussion and trade (Hurt: 2010. Pg. 163).

Holland states that the EPA is of great importance to the Cotonou Agreement as it prioritises the developmental aspects of the interactions between the EU and its partners, not just the

economic, increasing the role of NSAs in the pursuit of development (2002. Pg. 198). This is as the EU regards the involvement of these actors as quintessential to the promotion of democracy in development which, Holland states should in turn lead to conditions that allow for economic growth (2002. Pg. 203), as such the EU as a developmental actor seeks to promote democratic practice through Cotonou in order to create a solid normative framework in which the pillars of economic growth may be placed (Holland: 2002. Pg. 203). However, though the nature of Cotonou, and the EU's work within development more generally is inspiring, those criticising the work of the EU through Cotonou have offered similar critiques to that of the SDGs (for further details see Appendix I) (Lempert: 2017. Pg. 123). This being that though the aim of Cotonou is to facilitate the alleviation of poverty, it has provided no route for reaching that end, offering dwindling amounts of funding with no timeframe for their allocation (Holland: 2002. Pg. 205). Within this, though the agreement was accused of having no real guide for achieving the ultimate goal of poverty eradication (Holland: 2002. Pg. 205) it realised the fundamentality of being able to provide efficient and effective development assistance in the wake of disaster, a responsibility of DG ECHO, emphasising that the ultimate aim of development is the protection human life against the threats posed to it (Holland: 2002. Pg. 212).

Ultimately, Holland writes that Cotonou represents an important transition in how the EU deals with the Pacific region, offering a more expansive framework orientating the agenda for cooperation between the two entities (2002. Pg. 211). Regardless, Cotonou echoes a tried story in this thesis, that of enthusiastic goals in the name of sustainable development in which the EU again emphasises the need to eradicate poverty (Holland: 2002. Pg. 211).

Development/Humanitarian Nexus

In considering the role of sustainable development in EU discourse, it is also important to consider the development/humanitarian nexus as providing rationale for the EU's work within development more generally. In this it states that there is a need for the various institutions within the EU to coordinate their work so that it is aligned and focuses on both short and long term solutions to action undertaken in the name of development (European Commission: 2018). This nexus is related to the DG DEVCO and ECHO branches of the EU and is often associated with Linking Relief, Rehabilitation and Development (LRRD) which is the main reason behind the EU's work within international development (European Commission: 2018). This approach places emphasis on the need to not only deal with the humanitarian issues plaguing a nation, but also increase the capacity of these nations so that they may be better equipped to deal with pervasive humanitarian issues in the future (European Commission: 2018). It emphasises the need to work in collaboration with other developmental organisations under the authority of the government of the nation they are working in (European Commission: 2018). Further the nexus seeks to provide a framework whereby development action is undertaken, focus is placed on increasing the ability of those working on the ground in dealing with threats to the resiliency of communities. It endeavours to do this by dealing with the root causes of the developmental challenges, creating long term projects aimed at increasing the capabilities of countries to deal with the threats to their ability to develop (European Commission: 2018).

As such the intent of the work DG DEVCO is to build resiliency under the veil of humanitarianism (European Commission: 2018). Guiding this is the commitment of the EU to integrate a rights based approach to their interactions with developing countries (European Commission: 2016. Pg. 8). This is based on the belief that ensuring all people are able to have their basic rights met is a necessity to ensuring that lasting sustainable development

can take place (Council of the European Union. 2014. Pg. 2). Echoing the messages of the HRBA, the Council of the EU states that development efforts should operate on the basis that all people have rights and that these rights must be met (Council of the European Union. 2014. Pg. 2). Further, the SDGs (for further details see Appendix I) have clutched onto the HRBA, realising that it could be pivotal to minimising the number of people suffering as consequence of global prejudice (Bustreo, et al. 2015: Pg. 12). In this it can be understood that the rights based approach seeks to build bridges to mend the gaps that divide societies in their quest to ensure that all basic rights are met (Bustreo, et al. 2015: Pg. 12). This idea as well as those within the SDGs are evident in the new Consensus of Development (European Commission: 2017. Pg. 6).

The New Consensus on Development

Before considering the new Consensus on Development, it is important to consider how previous EU Agendas sought to orientate the actions of the EU and their member states around development issues. The Lisbon Treaty can be seen as the key document that put human rights discourse at the centre of the EU's external actions in development, this is as it hold firm that all member states must undertake action based on the stipulations of the Charter of the UN, ensuring that they adhere to their duties as members of the security council (Verola: 2010. Pg. 43). It made clear that the aim of the EU's work in the international arena would be undertaken with the intent of increasing security through eradicating conflict and promoting conditions of peace in the world (European Commission: 2018). However, although the aim of the Lisbon Treaty was to put rights at the fore of EU discourse, Verola states that the Lisbon Treaty did little more than amalgamate the messages of previous EU and UN treaties (2010: Pg. 43). In spite of this the Lisbon treaty sought to ensure that EU member states could retain autonomy in how they undertook action in the international arena

emphasising the need for a coherent and harmonised approach to work in foreign policy while ensuring that member states had the capacity to make their own decisions in how they pursue action at the international level (Verola: 2010. Pg. 44). The treaty illustrates a common battle within the EU, the fight for superiority between national autonomy and unified action. However the Lisbon Treaty sought to continue to base development work around the need to alleviate poverty while seeking to incorporate it into the wider frame of the EU's action in the international arena (Hurt: 2010. Pg. 160). Underlying this was the need to ensure that both member state and EU level action is undertaken in a way that works in tandem with each other (Bodenstein: 2017. Pg. 442).

The previous Consensus on Development, like the new one prioritises development that is centred on the improvement of human life over targeting economic development alone, this is generally aligned with the international shift to focus of placing the eradication of poverty at the heart of development efforts (Flint: 2009. Pg. 84).

The 2016 Consensus on Development came to exist as the EU has sought to integrate the 2030 agenda into the frameworks of the EU (European Commission: 2017. Pg. 3). It seeks to present a cohesive document showing a unified EU that aims to work collectively towards the pursuit of global development. The consensus seeks to address the key issues related to both the SDGs (for further details see Appendix I) and the concept of sustainable development, that of finding an equilibrium between the pursuit of social, economic and environmental growth (European Commission: 2017. Pg. 3) holding at its heart the need to orientate work within development around eradicating poverty (European Commission: 2017. Pg. 34). Like the Consensus, Hurt writes that the EU's other development policies have become more standardised in recent years, with work undertaken between the ACP, Latin and Mediterranean blocs being built on three key pursuits, bilateral trade, greater discussion of political agendas and ensuring that the provision of development aid is focused on eradicating poverty (Hurt: 2010. Pg. 163).

In implementing the SDGs (for further details see Appendix I) through the consensus, the EU holds firm that it will be fundamental for there to be increased interaction between both the EU institutions and member states as well as development actors, including nation states, NSAs and any other relevant stakeholders (European Commission: 2018). This is significant in promoting accountability, which is advocated for in the HRBA to development where the UN's Common Understanding prioritises the need to ensure that all levels of government as well as NSAs work to ensure that they are held accountable, though this is in regards to ensuring efforts to develop centralise the need to realise human rights (Carpenter, et al. 2012. Pg. 492). Though it must be understood that it is primarily the responsibility of governments to ensure that they work to implement the SDGs. In order to make sure this happens, the EU aims to assist developing countries in creating budgets and projects so that the SDGs may be enacted in their national frameworks. They help nations identify gaps and work to fill them (European Commission: 2016. Pg. 42) so to see success in the global pursuit of reaching the targets of the SDGs.

The consensus stipulates that both the EU and their member states should work to engage with the more developed, developing countries in advocating for the implementation of the SDGs (for further details see Appendix I); adapting them to fit the needs of those living within these countries. It seeks to ensure that vulnerable communities have the capacity to spring back from the things that threaten their livelihood. Because of this, the EU aims to foster more multi-actor partnerships so to effectively deal with the many risks to the stability of already fragile states. They seek to cater to the variety of needs that exist within development, addressing the needs of the most vulnerable first. The EU also seeks to engage with those from middle income nations, intending to utilise their knowledge and technical know-how in facilitating progress in global development (European Commission: 2017).

Bodenstein writes that the intent of the EU's development policies are aggressive in what they seek to achieve which has led to a gap between what the EU seeks to do versus what they have the capacity to do (Bodenstein: 2017. Pg. 443). He states that in the pursuit of targeting the plethora of developmental challenges that face the international community, the need for EU actor in international development continues to rise, whilst they are continually faced with their weakened ability to meet these demands, primarily due to tension between the bilateral pursuits of member states against the actions of the EU as a collective (Bodenstein: 2017. Pg. 443). Here it can be seen that it is a major misunderstanding to consider the act of the EU and their member states as one in the same, as often EU member states pursue action within the field of development through their own programmes with nations based upon their own prerogatives within development (Bodenstein: 2017. Pg. 443), Although there is debate regarding the work of the EU in development, the most recent Consensus on Development is an innovative document that has sought to coordinate the efforts of the EU and their member states in the pursuit of development, in the wake of the SDGs (for further details see Appendix I), however although seeks to provide a single voice on development issues, portraying a unified EU. In this, the EU holds central the need to work as a global collective in order to see success in meeting the targets of the SDGs (European Commission: 2016. Pg. 3). For the SDGs to be met, efforts must be made to pursue sustainable development at the national, regional and community level. As such the EU aims to work more at the regional level, taking to account the most pressing issues within each region and the resources at their disposal. It then seeks to cater their engagement in order to work to the abilities of these communities in their attempts to progress in development. The EU holds firm the importance of ensuring all actors are accountable for implementing measures that ensure the SDGs (for further details see Appendix I) are actualised. In this, the EU recognises that it has the unique ability to not only be a donor, but

to act as an advisor over the formulation of policy and development strategies (European Commission: 2016. Pg. 43) something that will be seen in the EU's engagement with PNG.

The 11th EDF

The provision of EU aid primarily takes place through the EDF (Hurt. 2010. Pg. 164). The Pacific Regional Indicative Programme (PRIP) covers all EDF funding to the Pacific area for projects aimed at assisting these nations in their development, they are complex requiring commitments not only at the EU level but from member states with the approval of their national governments (Pacific Islands Forum Secretariat: 2017) illustrating the complexity of the EU system, as stated by Bodenstein previously (2017: Pg. 444). The 11th PRIP EDF best represents the delays that can take place in EU work, this is as the signing of the 2014-2020 didn't take place until 2015, having required the consensus of all EU member states before it could be formalised (Pacific Islands Forum Secretariat: 2017). The PRIP has the core aim of assisting, through the provision of financial support, the Pacific region in strengthening regional cooperation, within this it focuses on merging Pacific economies by increasing trade between Pacific businesses, ensuring that natural resources are used sustainably, and establishing greater respect and recognition for human rights (EU - Pacific Islands Forum Secretariat. 2015. Pg. 4). As this thesis endeavours to focus on the development of projects aimed at facilitating increased access to WaSH services, in relation to PNG it is important to see what the work of the EU is doing in the Pacific region in regards to sustainable development, especially in regards to WaSH. The PRIP works off of the back of the Pacific Plan focusing on the four key objectives the Plan works towards, that of ensuring growth and development take place sustainably with the promotion of good governance and the provision of a safe environment for Pacific Islanders to live in (EU - Pacific Islands Forum Secretariat. 2015. Pg. 6).

PNG is currently in its 11th EDF cycle. Under this is the National Indicative Programme (NIP), which sets the agenda for the relationship between the EU and PNG for the 2014 to 2020 period. It coordinates the work the EU sets to undertake in PNG, seeking to align it with the priorities set by government of PNG for their development. The NIP, like much of the work undertaken by the EU, has the overarching aim of assisting in undertaking methods of sustainable development so to see a reduction in the prevalence of poverty in the region (European Commission: 2016). However Flint argues that negotiations between the Pacific bloc and the EU has only fragmented the pursuit of regional integration, even though their aim was to strengthen it (2009. Pg. 89). This is as only PNG and Fiji signed European Pacific Agreements (EPAs) (Flint: 2009. Pg. 89).

For the 2014-2020 period, PNG's NIP has been granted €184 million. This has been allocated towards three key areas in order to assist PNG in their development. €85 million has been directed towards rural investment and trade, €60 million to WaSH which will be the focus of this thesis, €30 million for education, and €9 million in order to provide additional support to PNG in their development efforts (EU - PNG: 2015. Pg. VIII). How the EU has chosen to allocate aid shows the wish of the EU to prioritise matters related to WaSH, giving the second highest amount of aid to the WaSH sector . This is only made clearer as when it is understood that PNG has the worst access to WaSH services in the Pacific a fact that is emphasised when considering that currently it is estimated that just over 60% of the population forego access to clean water, while around 55% of the population do not have improved access to sanitation services (EU - PNG: 2015 Pg. 6). Something only furthered when we consider they types of water used and sanitation services available in PNG as compared to the rest of the Pacific, as illustrated in figures I and II where we can see that PNG experiences the highest number of users of surface waters (Figure 1. World Health Organisation: 2016. Pg. 17) as well as the highest number of people experiencing unimproved access to sanitation services (Figure II. World Health Organisation. 2016. Pg. 9)

clearly illustrating that PNG is well behind their Pacific partners in facilitating improved access to WaSH services.

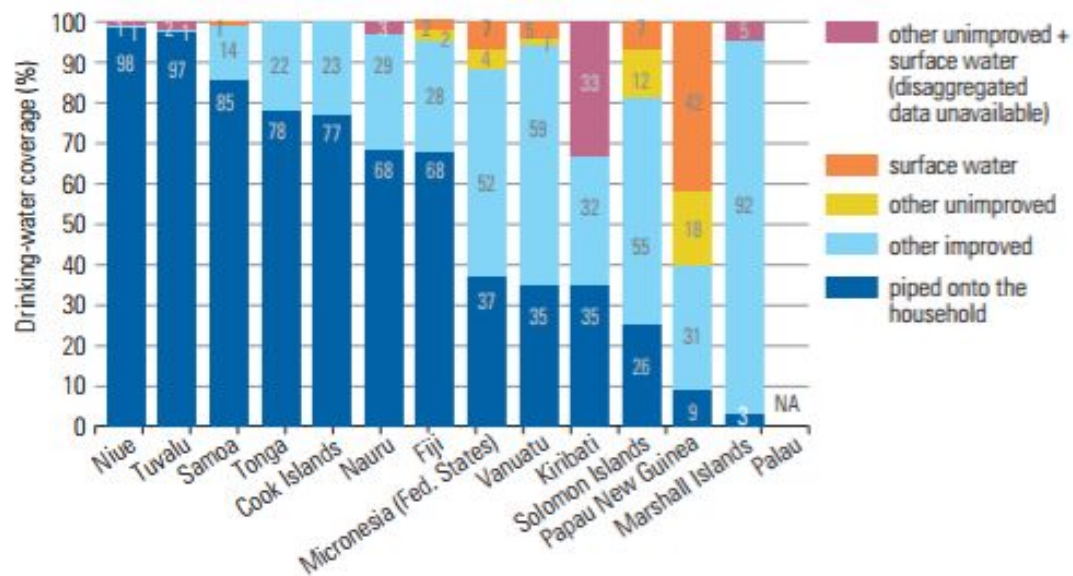


FIGURE I: Water Sources used across Pacific Island Nations in 2015.

(Source: World Health Organisation. 2016. Pg. 17).

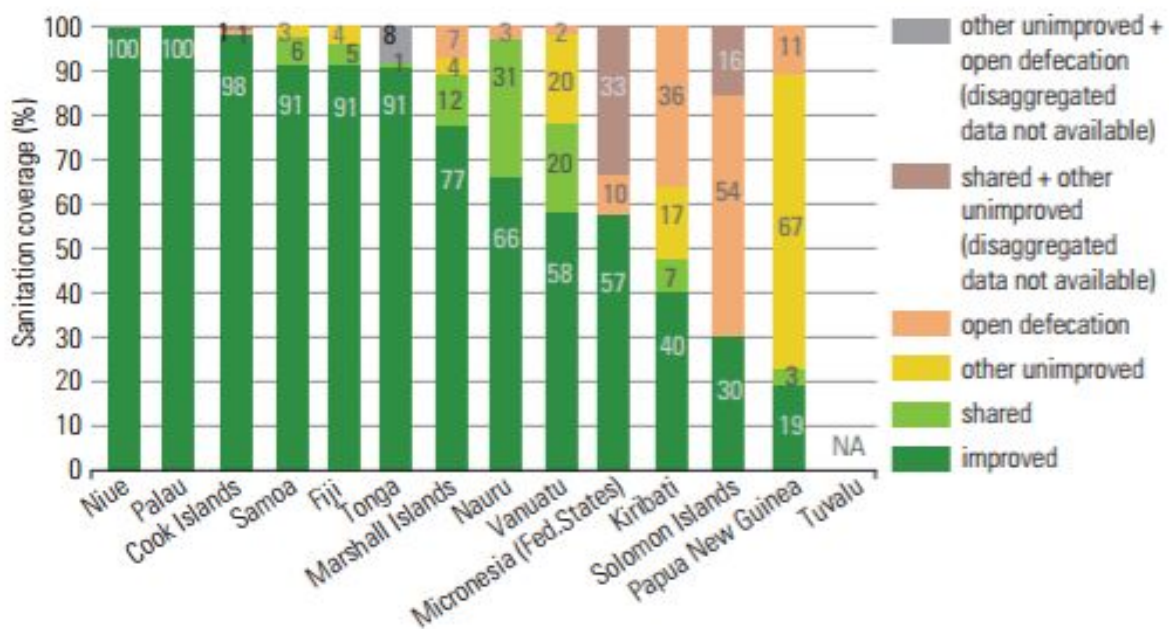


FIGURE II: Use of Sanitation Services across Pacific Island Nations in 2015.

(Source: World Health Organisation. 2016. Pg. 9).

The key objectives from the EDF is to assist in enacting policies in PNG that seek to eradicate poverty, while promoting the ideas of sustainable development and improving the quality of life experienced in the country. The aim is to provide greater access to WaSH services primarily through the creation of a national WaSH policy. It further seeks to ensure that the SDGs (for further details see Appendix I) become attainable targets for PNG (European Commission: 2016. Pg. 2).

In seeking to do this is could be useful for the EU to understand the HRBA in the way Ussar explains it, as a tool that seeks to address a specific problem before taking a systematic approach to identifying the possible solutions to these problems (2011. Pg. 4). It the HRBA, the EU would be considered the duty bearers in facilitating the communities of PNG with the tools needed for them to work to increase their own capacity to meet their basic rights and needs (Ussar: 2011. Pg. 4). In believing this, Ussar contends that the HRBA seeks to provide purposeful solutions to developmental problems (2011. Pg. 7). In Ussar's conception

of the HRBA framework it can be perceived as seeking to provide a targeted approach to developmental problems affecting a region (2011. Pg. 7) something that the EDF can be seen to do in allocating specific funds to assist in the development of PNG (EU - PNG. 2015: Pg. VIII).

In focusing on sustainable development, the core objective of the EU's work under the 11th EDF is to ensure that there is improved access to WaSH and better hygiene practices in accordance with the new WaSH policy. In aiming to achieve this the EU has the following goals; to facilitate the improvement of living conditions, especially for children and women so that they may not be affected by water related illness. They also aim to ensure better delivery and management of WaSH services. If these objectives are met, there should be better access to improved WaSH services, including clean water in schools and health care facilities. Something that the EU is addressing in working alongside UNICEF, something that will be explored in Chapter Four. The EU also aims to work closely with the government of PNG in order to see the effective enactment of the WaSH policy, increasing the ability of the government of PNG to undertake, oversee and assess the effectiveness of the WaSH policy in ensuring that more people have access to WaSH services. This will require extensive monitoring.

THE EU in the Pacific

PNG's interactions with the EU take place largely through the ACP under the Cotonou Agreement. The partnerships between the EU and Pacific Island countries has been instrumental in dealing with poverty in the region, providing greater access to the basics needs of life (e.g. water); as well as increasing awareness around climate change, seeking to take preventative action so to minimise the effect climate change will have on this vulnerable region (European Commission: 2016).

PNG is an important country in the relations between the EU and the wider Pacific due to its size making it the largest island in the Pacific. It also boasts the biggest economy of the Pacific and with a population in excess of 7 million, as such it can be argued that PNG is one of the Pacific's superpowers. Regardless of PNG's economic dominance in the Pacific, the nation has some of the most alarming statistics to emerge from the region. PNG has the highest maternal and childhood mortality rates as well as low levels of literacy and attendance to educational facilities. Aware of this, the EU Delegation to PNG is focused on investing in rural areas, education, and WaSH (EEAS: 2016). The NIP has allocated €60 million towards WaSH in PNG. The intent behind providing these funds is to create better conditions for those living in PNG, thus increasing quality of life, through facilitating greater access to water supplies and sanitation in accordance with national initiatives on WaSH in PNG. The EU also aims to deal with health related issues stemming from water. It is hoped that this will create a safer environment for women and children, understanding that they are often the first to suffer the negative impacts of insufficient access to WaSH. As well as this, the EU aims to promote the importance of accountability and government engagement in the provision of better access to water and sanitation services in PNG (European Commission: 2016).

This is also important to consider the work of the EU with the wider Pacific region. In particular, the EU has worked with the Pacific Islands Forum Secretariat under the Cotonou Agreement in order to assist the Pacific in their development (EU and Pacific Islands Forum Secretariat: 2015. Pg. 2). An example of the EU's work within the Pacific is DEVCO's work with key partners in the Pacific through the Investment Facility for the Pacific (IFP), in this they offer support to the governments of Pacific Island nations in order to facilitate development that is sustainable (European Commission: 2018). The IFP was introduced in 2012 with the intent of seeking to work towards the key objectives of the EU's work within development, that of alleviating poverty and working towards combating the effects of

climate change (European Commission: 2018). Though focusing on providing the financial mechanisms to promote development - these being financial handouts and specialist support, the key thing to consider in the IFP as related to this thesis is to ensure that the work of donors is clear and adheres to the principles as outlined in the Paris Declaration (European Commission: 2018).

The EU has continued to expand on its partnership with the Pacific through agreements such as the above, focusing on capacity building. In this, the EU has continued to focus on implementing projects that seek to provide the tools needed to work towards the achievement of the SDGs (for further details see Appendix I) (European Commission: 2017). It is doing this through the Technical Cooperation and Capacity Building Capacity (TECCBUF) Financing Agreement which aims to work to assist NSAs and civil society in being able to manage programmes so that these Pacific nations may achieve the SDGs (for further details see Appendix I) (European Commission: 2017). Director Amilhat cites this in conjunction with the EDF are pivotal in assisting the countries in the Pacific in working towards not only enacting on the SDGs but also in meeting the targets they lay out in their own interpretations and priorities for the SDGs (European Commission: 2017). The TECCBUF seeks to improve the capabilities of Pacific Island nations so that they may be in control of the projects funded by the EU, changing the dynamic of the partnership between the EU and the Pacific from donor-recipient to that of equals (European Commission: 2017). As a donor the EU has worked to assist countries like PNG in their development. In attempting to do this through the Cotonou Agreement, the EU has focused on integrating the concepts within sustainable development, with the core aim of reducing the number of those living in impoverished conditions (Holland: 2002. Pg. 208). It must be understood that this has been a key role of the EU, being evident in messages since Maastricht (Holland: 2002. Pg. 208). Further the role of the EU as a donor is stressed when considering the strains placed on funds in the Pacific region, the EU aims to use the likes of the PRIP in providing

additional support to projects, especially ones that involve both private and public actors so that they may be effective in the projects they implement (EU - Pacific Islands Forum Secretariat. 2015. Pg. 9). Chapter Four seeks to expand on the EU's role as a donor body, using the example of WaSH in PNG to understand how the EU works with partners to provide the services needed to facilitate improvements to WaSH services.

CHAPTER FOUR: WaSH IN PNG

The previous chapters clearly illustrate that WaSH is regarded as an important issue to be dealt with in global development. The SDGs (for further details see Appendix I) and the work of the EU seek to tackle the task of improving access to WaSH, working to not only facilitate improved access to these services but also work to ensure there is greater awareness of efficient use and proper hygiene practices. Having established these theories and understanding them as they relate to the SDGs and the attitudes of the EU in its actions relating to development, this chapter will now look at the case of WaSH in PNG.

In analysing the effect of WaSH on health, poverty and economic growth in the region, this chapter will analyse the 2015-2030 WaSH policy, considering how this policy came to fruition, the issues it seeks to address and how it aims to find solutions to these problems, so that all people are able to access to improved WaSH services. Following this, this chapter

will look at the role of partnerships in finding solutions to the problems communities face in regards to the accessibility of WaSH. After this, this chapter will consider poverty and how WaSH contributes to this before reflecting on the EU-UNICEF WaSH in Schools programme which has aimed to assist in meeting the targets of the WaSH policy as related to access to WaSH services in health and school.

Ultimately this chapter aims to understand the state of WaSH in PNG, in light of the theories addressed in the previous chapters. It endeavours to understand how the new WaSH Policy addresses the 2030 Agenda, before looking at the EU-UNICEF WaSH in schools project, all while connecting the points covered in previous chapters. In essence, this chapter seeks to use the case of WaSH in PNG to illustrate the enormity and importance of WaSH in the quality of life people are able to enjoy in life.

PRELUDE TO THE WaSH POLICY

The new WaSH policy has attempted to create a framework in which the government of PNG will work to meet the targets of SDG 6 (for further details see Appendix II). The policy echoes many of the core aims of the SDGs (for further details see Appendix I) and sustainable development, the notions of poverty eradication and ensuring that efforts to develop now, do not compromise the wellbeing of future generations (Department of National Planning and Monitoring. 2015: Pg. i). In alignment with the SDGs, the new policy seeks to ensure that come 2030 more people are able to access clean, safe and reliable sources of water, emphasising the need to ensure that all health and educational facilities have complete access to WaSH services, while significantly increasing the number of people in rural and urban areas with access to these services (Department of National Planning and Monitoring. 2015: Pg. 8). Importantly, the WaSH policy treats WaSH services as a human right that all people ought to have the ability to access, stating that the government has the responsibility

of ensuring that all people retain the ability to use these services (Department of National Planning and Monitoring. 2015: Pg. 9). However, while appreciating that water is a right, the policy seeks to work on the understanding that water resources are also limited and as such efforts must be made to ensure that these resources are used sustainably (Department of National Planning and Monitoring. 2015: Pg. 9).

It would seem that boosting access to WaSH services, in conjunction with promoting proper hygiene practices, could have a great impact on health and poverty in PNG. Providing the facilities to ensure the delivery of WaSH related services is not enough. It is important to supplement these services with education to ensure that the structures implemented will be maintained and used long after additional support from organisations is retracted, an inevitability in work within development due to both funding constraints and the ever increasing needs placed on these funds, it is not feasible for organisations to stay in a region permanently and as such reliance is being placed on non-traditional forms of assistance, particularly as developing countries seek to embark on meeting the targets of the SDGs (for further details see Appendix I) (Xu: 2015). This is echoed in the ideas behind sustainable development which highlights the need to ensure that any effort to develop is undertaken with the intent of creating long term changes to the region projects are undertaken in, and that these changes are sustainable even without the assistance of outsider organisations. To date most support given to the WaSH sector in PNG has gone into implementing delivery service infrastructure like pipes and taps, usually with minimal engagement with the communities they operate in (Barrington and Greenhill: 2013. Pg. 106). It is clear that this has not worked with PNG still struggling to provide its citizens with access to WaSH services. It will be important that future development efforts seek to engage at a deeper level with local community members, so to increase the likelihood of long term success in development (Barrington and Greenhill: 2013. Pg. 106).

Although global goals and the national goals that have stemmed from them have attempted to improve access to water and sanitation in PNG, disease and illness caused by a lack of access to clean water and adequate levels of sanitation are still rife. As Galing writes, isolation caused by a lack of infrastructure and unaccommodating geography means that rural areas are often inaccessible making it difficult to target them as areas to improve access to water, something that has inhibited the government of PNG as it has sought to improve access to WaSH services in the region (2016). However, in spite of the challenges, the new WaSH policy intends to significantly reduce the number of those who forego access to the most basic WaSH services.

PNGs 2015-2030 WaSH POLICY

Increasingly we see that PNG is working in alignment with the values of the EU, that of targeting vulnerable areas, engaging with all relevant actors in the wish to develop, and using resources efficiently whilst utilising assistance in order to maximise the outputs of projects, something seen in the EU's Consensus on Development (European Commission: 2017. Pg. 38) and the national WaSH policy, which lays out which organisations within the WaSH sector are accountable for the implementation of parts of the new policy (Department of National Planning and Monitoring: 2015. Pg. 25). Within this it can be seen that for the policy to be successful it requires the involvement of government, private and the non-governmental sectors in order to implement the targets of the policy (Department of National Planning and Monitoring: 2015. Pgs. 25-26) The idea of collective engagement can be seen in the EU's Consensus where the EU necessity of engaging with all relevant stakeholders in order to develop, enact and evaluate policy (European Commission: 2017. Pg. 53),

PNG has tremendous challenges ahead of them in working towards meeting the goals of the WaSH policy, as aligned with the SDGs (for further details see Appendix I) (Sustainable Development Knowledge Platform: 2016). This is as currently over 60% of the population are going without access to clean water and sufficient sanitation services. Because of this providing universal access to WaSH facilities will be a challenge, especially when considering the current state of WaSH in PNG, as illustrated in Figure III.

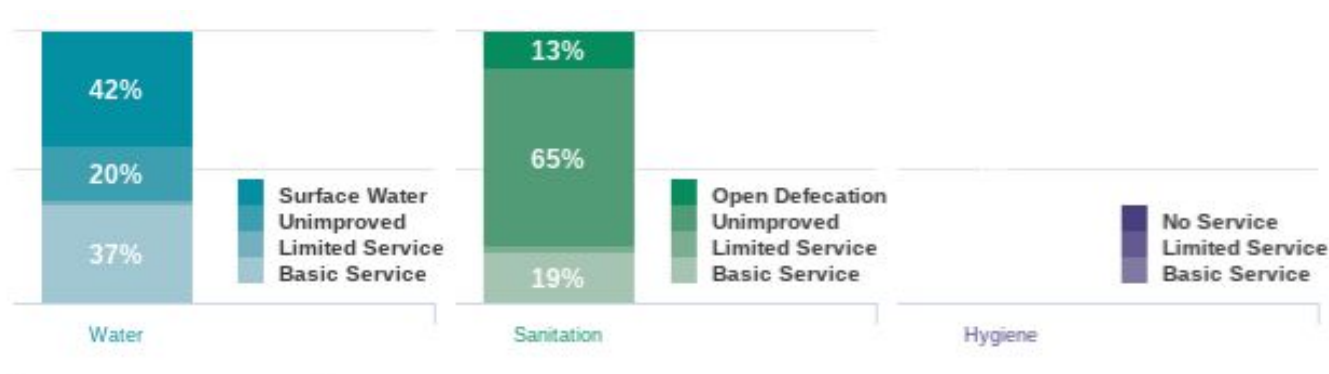


FIGURE III: Access to WaSH services in PNG 2017.

(Source: Countdown to 2030: 2018).

As such, PNG has the worst access to WaSH services in the Pacific region (illustrated in Figures I and II in Chapter Three). This new policy is ambitious and in seeking to achieve the targets of this policy, the government of PNG will need to work to provide the facilities and government structures required in order to provide greater access to WaSH services. It will be important that government actors have the capacity to regulate and be accountable for the provision of WaSH in PNG, which has thus far been limited resulting in a lack of access to WaSH services.

The establishment of the 2015-2030 WaSH policy (for further details see Appendix III) is an effort by the government of PNG to deal with WaSH holistically, taking into account the

complex and cross-sectoral nature of issues related to WaSH. Allen states that PNG has taken great strides in their wish to facilitate greater access to WaSH services through the establishment of the 2015-2030 WaSH policy, the first of its kind, not only in PNG, but globally. This represents a shift in the wish of PNG to make itself accountable for the provision of universal access to WaSH services within the country (Allen: 2017). In doing so the government seeks to reduce the number of those living in vulnerable states as consequence of a lack of water and sanitation.

The WaSH policy emerged after years of planning by the government in conjunction with organisations like the EU and UNICEF (The World Bank: 2017). The policy has the target of providing 70% of rural populations and 95% of urban populations with access to clean, sustainable and easily accessible WaSH services by 2030 (Department of National Planning and Monitoring: 2015. Pg. 8). This is considered a zealous attempt by the government to address the struggles it has had in providing access to WaSH services in PNG, one that will require the continued support of donors and organisations so that it may be effectively implemented (The World Bank: 2017), this is especially as this is the first policy related to WaSH in PNG (Community-Led Total Sanitation: 2016).

As well as the target above, the new policy has the following objectives, which PNG also intends to meet by 2030. It focuses largely on school and health care facilities, intending to ensure that both have complete access to all WaSH services. In regards to sanitation, the policy seeks to see 85% of those living in urban areas and 70% of those in rural areas having access adequate sanitation services. Again, all educational and health care facilities should have access to adequate sanitation services (Department of National Planning and Monitoring: 2015. Pg. 8). Regarding hygiene, all schooling and health care facilities ought to have running tap water and soap and all houses will have improved services to facilitate hand washing (Department of National Planning and Monitoring: 2015. Pg. 9) (refer to Appendix III for all the targets of the WaSH Policy).

This policy shows that there are links between WaSH and health, as well as the importance of increasing the accessibility of WaSH facilities so to see school attendance and achievement rates increase. The policy seeks to focus on ensuring that the key facilities related to health and education have access to reliable WaSH services. In doing this the policy seeks to improve quality of life as children will be able to attend school, increasing their prospects of success and ability to earn a livelihood. Health services are an equally important target of this policy as without access to WaSH services they are limited in their ability to assist those suffering from illness. As well as this many healthcare facilities have been inoperable as a result of having no access to basic WaSH services.

As mentioned, in addressing the issues related to WaSH, the new policy seeks to improve sanitation facilities in PNG. This means that the facilities provided are safe, hygienic and prevent human waste from escaping and contaminating the external environment, particularly surrounding water sources. The policy seeks to ensure that facilities are accessible, meaning that all people are able to access sanitation services easily and that they are close to home, especially for women and children. The policy stipulates that each facility should be used by no more than 30 people. They must also be able to provide safe sanitation services for the foreseeable future. The policy sets a minimum standard for sufficient sanitation services, this being a ventilated latrine (Department of National Planning and Monitoring: 2015. Pg. 7). In this, the government of PNG seeks to take steps towards achieving target 6.2 of SDG 6 (for further details see Appendix II) in providing equitable sanitation for its citizenry (Sustainable Development Knowledge Platform: 2016).

For PNG to see improvements to the quality of life their citizens are able to experience, it'll be fundamental that the government focuses on promoting good hygiene, whilst facilitating greater access water and sanitation services, so that all citizens of PNG may benefit entirely from the provision of these services. In taking a holistic approach to WaSH, it is hoped that this may be achieved. The government in recognising this, aims to have 85% of the urban

population, and 75% of the rural population experiencing improved access to these services. It specifically states that come 2030, all educational and health care facilities will have better access to WaSH services (Allen: 2017). In order to do this, the policy endeavours to create long term changes in hygiene practices. It places emphasis on the practice of handwashing in relation to proper hygiene. In doing this the bare minimum standard to be met in promoting better hygiene is ensuring that water will be treated and stored safely, infant waste will be properly disposed of and those changing the child will wash their hands after. Generally, the promotion of hand washing will be a consistent feature of efforts to achieve the targets of this policy as it is understood that it is important to reducing the likelihood of spreading illness (Department of National Planning and Monitoring: 2015. Pg. 7).

This policy aims to improve the wellbeing of those living in PNG through facilitating better access to WaSH services, in particular it seeks to reduce the number of deaths caused by inadequate access to water. It aims to facilitate economic growth by seeing improvements made to health. As well as equalising the provision of WaSH services between urban, rural and urbanising regions (Department of National Planning and Monitoring: 2015. Pg. 8). As such it will be important to educate the communities in PNG of the importance of good hygiene practices in order to create sustainable changes within communities. These messages should be reinforced in schools, health care facilities and even by governments in order to provide consistent and continuous messages of the importance of good hygiene practices (Department of National Planning and Monitoring: 2015. Pg. 20).

The WaSH Policy will be central to the success of PNG in meeting the targets of SDG 6 (for further details see Appendix II), as well as providing an environment in which those living in PNG may flourish. The policy seeks to work with the overarching aim of bettering the lives of those in PNG by reducing instances of water related disease, the time spent by women collecting water and the disparities in access to WaSH services, which only places vulnerable people further into the periphery of society (Vari: 2017). It is important that actors

are realistic in understanding the capacity of PNG to achieve the SDGs (for further details see Appendix I), given its struggles in the past to provide WaSH services, however there should be a level of optimism moving forward in efforts to develop the region. The WaSH policy represents a shift in attitudes of PNG in their dealing with WaSH, understanding that previously efforts were halfhearted at best, sporadic and lacking in cohesion and unity, which resulted in poorly managed projects that didn't penetrate the areas with the greatest need. The policy aims to address this, especially as the government realises that as a result of a poorly managed WaSH sector, the quality of services under WaSH have lessened and facilities have been unable to meet the increased demand from a rise in population (Vari: 2017).

In the WaSH policy the government of PNG seeks to take accountability over the provision of WaSH services, understanding that providing universal access to these services will be fundamental to seeing growth in PNG as a whole. In recognising the cross sectoral nature of WaSH services, the government sees that water is fundamental to seeing their citizens experience a good quality of life, experience good health care outcomes and increased access to education, whilst seeing vulnerable and marginalised persons have the ability to lead their day to day lives with their basic needs met. The government has sought to utilise the assistance provided by donors and organisations, who have not only been active in the creation of the policy, but also in projects that seek to facilitate the achievement of the ambitious targets of these projects.

PARTNERSHIPS AND NGOs IN PNGs WaSH SECTOR

WaterAid states that in the establishment of the WaSH policy the governmental sphere has become more accommodating to WaSH related issues, with the government seeking to take a more central role in efforts to increase the accessibility of WaSH services (European

Commission: 2016. Pg. 2). Within this the government has a desire to see increased collaboration between NGOs, donors and other relevant actors in order to see the successful implementation of the new policy (WaterAid: 2016. Pg. 2).

There are a plethora of actors engaged in the WaSH sector in PNG. These actors have sought to assist in the development through establishing partnerships with local organisations. Carrard writes that in working in development in PNG, engagement with local groups are pivotal and that NGOs must retain a degree of malleability in the work they undertake, understanding that there are differences between rural and urban areas (2008. Pg. 9). An example of taking a more flexible approach to development efforts between different regions is the work of AusAID and PNG Churches Partnership Program (PNG CPP) where churches seek to work to meet broad targets as opposed more specific goals. This approach allows church groups to work off of their respective strengths resulting in more effective programmes as they do not need to work in unfamiliar environments (Carrard: 2008. Pg. 12). This approach Carrard states is particularly relevant for PNG as often times churches have the greatest capacity to operationalise development projects within the WaSH sector as their many branches enable them to talk with community members and understand exactly what the people living in these communities feel they need most (Carrard: 2008. Pg. 47).

Many actors within development have sought to take on rights based approaches to development. Schmitz writes that in the early stages of the HRBA actors including Oxfam had sought to base their actions off of this approach to development (Schmitz: 2012. Pg. 524). In the early 2000's more actors looked to orientate their work based off of the HRBA with actors like Save the Children seeking to implement this approach to their projects (Schmitz: 2012. Pg. 524). In implementing a HRBA to efforts to ensure there is increased access to WaSH services to the citizens of PNG, development actors will seek to ensure that there is greater awareness regarding WaSH in the community and greater collaboration

between development actors so to ensure that there is greater advocating for rights and better ability to deal with the root causes of these developmental issues (Schmitz: 2012. Pg. 533). Something the next section will show the EU and UNICEF have sought to do through their partnership in the WaSH in Schools project.

RECENT ACTIVITY: THE EU AND UNICEF, WaSH IN SCHOOLS

The work of the EU in PNG has the intention of actualising the efforts made by the government of PNG to increase access to WaSH services. In the establishment of the 2015-2030 WaSH policy (for further details see Appendix III), the EU has opted to work alongside UNICEF in order to assist PNG in ensuring that all men, women and children have access to WaSH services. The EU has decided to work with UNICEF understanding that they both regard water as a key issue to be dealt with in development efforts, recognising that it is not only a critical issue to be dealt with in relation to health, but that it is also central to seeing the fulfillment of the SDGs (for further details see Appendix I) in PNG (UNICEF: 2017).

The 11th EDF has seen the EU and UNICEF combine efforts for the 2017 to 2021 period, establishing a multi-donor project aimed at addressing the lack of WaSH services in health and education in PNG (Allen: 2017). This shows the EU enacting on their desire to foster multi-party relations within development, as stated in the Consensus (European Commission: 2017: pg. 42). The project will work across four regions in PNG, targeting 200 schools and 36 health care facilities, seeking to improve their access to safe water, sanitation and handwashing facilities. This joint effort seeks to establish regional responses to WaSH, assisting in the creation of plans that increase the abilities of development authorities working across these regions. These groups will establish 5 yearly WaSH plans that will allocate funds and enact strategies that will evaluate the progress made in achieving

the targets of the WaSH policies, with the intent of incorporating monitoring procedures into their work in order to ensure that the provision of WaSH services takes place sustainably and is facilitating improved access to these services. Allen states the increased commitment of the government of PNG and the continued assistance of the EU will be pivotal in ensuring that all people may access improved WaSH services in the country (Allen: 2017).

UNICEF is a key actor in PNG, particularly in regards to WaSH. Currently, they are working in 19 communities with their 'Child friendly school' project. They aim to deal with the many issues that fall under WaSH, primarily in matters related to nutrition, and the promotion of education so to change behaviours related to hygiene. In particular UNICEF is focusing on menstrual hygiene so to reduce the number of girls leaving school early as consequence of menstrual problems (UNICEF. 2012. Pg. 34). In working in schools, UNICEF has fostered a relationship with the Department of Education as well as the Department of Health so to assist in increasing the availability of maternal health care for mothers living in rural areas (European Commission: 2016. Pg. 6). It has been established that historically the responsibility for WaSH has come down to the Department of Health within the government sector, making coordination between them and actors like the EU and UNICEF important in ensuring active engagement by the government so to increase the likelihood of long term success and positive change within these communities. In these efforts, UNICEF has collaborated with the Department of Education in order to implement departmental strategies focused on providing WaSH services in schools (2016: Pg. 7). They have also sought to work with leaders of the health sector to offer support to PNGs provinces in taking a rights based approach to reducing the inequalities that exist in access to health care services in the Jiwaka, Madang and Simbu areas with the intent ensuring that those working in the health sector of these regions are aware of the fundamentality of equal provision of health services in improving health outcomes for these regions (UNICEF: 2016. Pg. 8).

There are approximately 14,000 schools in PNG without access to water, while others have inadequate infrastructure restricting the ability to provide schools with water services.

Hygiene results fare no better. Enabling improved access to WaSH services in schools provides a gateway to facilitate greater changes to the actions of the wider community.

Involving parents and educators in campaigns aimed at promoting good hygiene practices, like hand washing, will be important in seeing reductions in the number of people suffering from communicable disease within PNG (European Commission: 2016. Pg. 7). Further, improving access to water and good hygiene practices is set to benefit menstruating girls who often leave school prematurely as consequence of insufficient facilities to cater to their sanitary needs. As such, facilitating the implementation of better services seeks to see increased numbers of girls attending school (European Commission: 2016. Pg. 7). Health care facilities also struggle with insufficient access to WaSH services. There are 683 healthcare clinics and 22 hospitals in PNG. In 2015 it was stated that a number of these facilities were shut down as consequence of water being unavailable to them (European Commission: 2016. Pg. 7). The WaSH policy seeks to ensure that by 2030 all health and education centres will have complete access to WaSH services (European Commission: 2016. Pg. 7) Here there are clear parallels between the deadlines of the SDGs (for further details see Appendix I) and that of the WaSH Policy. This requires the continued assistance of the EU and organisations like UNICEF in order to increase the likelihood of this ambitious target being met.

Through this project UNICEF will identify the needs of schools and health care facilities, finding clean water sources in order to facilitate improved access to these services. UNICEF will create frameworks by which they can set standards for WaSH in health centres and schools in both rural and urban areas, addressing the need to adjust them so to deal with the effects of climate change on these communities. They will also provide the means to train relevant actors so that they may understand the importance of increasing awareness of good

hygiene practices, eradicating the practice of open defecation, and the need to increase the functionality of WaSH facilities. UNICEF further seeks to implement actions related to WaSH in selected regions, seeking the involvement of all relevant actors. In doing this UNICEF will provide financial support to organisations to construct facilities to supply water and sanitation to selected health care centres and educational facilities. They will provide the support to organisations, so that they may educate communities, through schools and health centres, on hygiene promotion. UNICEF will also seek to find other actors to monitor the implementation and outcomes of projects (European Commission: 2016. Pg. 11). This shows an understanding of the importance of monitoring in order to ensure that projects have the potential to create long term change and facilitate improvements to the most vulnerable pockets of the community. This is in alignment with that of HRBA approaches to development.

The collective work of the EU and UNICEF aims to lessen the gap between rural and urban areas in access to WaSH services. The project intends to ensure that there is greater awareness regarding best sanitary and hygiene practices, whilst further increasing financial support to the WaSH sector. The EU is providing PGK \$80 million towards this project (UNICEF: 2017). Allen states that the support of the EU will be central to ensuring that there is progress made in the ability to access to health related WaSH services in PNG, which will result in better healthcare outcomes, especially for vulnerable groups, namely children. It is important to understand that a lack of access to these services has led to poor hygiene practices and negative healthcare outcomes in PNG, affecting adults and children indiscriminately, restricting their ability to live a life of quality. Further, it must be understood that women and children are often more susceptible to water related illness, the work of the EU and UNICEF is even more important in ensuring that communities, particularly in rural areas receive improved access to WaSH related services, especially when recognising the gap between rural and urban access to WaSH services (UNICEF: 2017).

The work done between the EU and UNICEF in the and health programme works primarily towards the achievement of SDG 6 (for further details see Appendix II) (Sustainable Development Knowledge Platform: 2016). The project seeks to improve the well being experienced by all persons living in PNG through facilitating greater access to WaSH services and improvements made through the enactment of the national WaSH policy. Here there are hints of the Capabilities Approach, where we see a focus on maximising the wellbeing those in PNG are able to experience through creating a healthier environment, targeting women and children so to reduce the impact of WaSH related illnesses on them. The work of this project has the further aim of increasing the quality of WaSH services in accordance with the WaSH policy. It seeks the engagement of stakeholders including the WaSH Project Management Unit (PMU), UNICEF, and the Departments of health and education, focusing specifically on health and school facilities in both rural and urban areas. They seek to target communities with campaigns aimed at ending the practice of open defecation, which has been identified as a target of SDG 6 (European Commission: 2016. Pg. 2).

The WaSH in Schools project illustrates that the EU and UNICEF have sought to apply the HRBA and work with the intent of increasing the capacity of communities to increase the well being they are able to experience, a key message in Nussbaum's conception of the capabilities approach where she necessitates proper health as a precondition to human beings being able to live a life of dignity (Nussbaum: 2002. Pg. 134) in this it can be said that WaSH has been targeted as it is central to ensuring people have the capacity to experience good health outcomes through focusing on the facilitation of water, sanitation and hygiene services to those living in PNG. Both the EU and UNICEF have sought to take on rights based approaches to development, with UNICEF being the first actor within the UN framework to formally accept the rights based approach in their development actions and being an instrumental actor in the formulation of the UN's Common Understanding of 2003

which is a key document cited in discussions surrounding the HRBA (Carpenter, et al. 2012. Pg. 479). Within this Schmitz states that in alignment with the HRBAs wish to see development efforts work based on the ideals stipulated in international agreements, UNICEF would undertake work orientated around the Convention of the Rights of the Child (Schmitz: 2012. Pg. 524). Further in addressing capabilities Nussbaum writes that the capabilities approach ensuring one's capabilities does not come down to the creation of a state that is prepared to act, it comes down to creating change to a nation's social structures, so that people may have the ability to live an operable life within their society (2002. Pg. 132). The actions of the EU and UNICEF, as well as the 2015-2030 WaSH policy more generally focus on behavioural change as necessary (Department of National Planning and Monitoring: 2015. Pg. i) action to ensure increased accessibility of WaSH services thus illustrating the importance of changing the behaviours exhibited within a society in order to secure long term developmental changes, with the overarching aim of securing sustainability within developmental efforts (Department of National Planning and Monitoring: 2015. Pg. 21).

The intended reach of this project is great, it recognises the parallels between insufficient access to WaSH services and poor healthcare outcomes, as well as the restricted ability of children to attend school as consequence of insufficient access to these services (Patjole: 2017). However the targets of PNG's WaSH Policy is even more ambitious than this meaning that work will need to continue to be done for there to be any hope of achieving universal access to WaSH services across schools and health care facilities by 2030. It can be seen that the work of the EU with UNICEF has sought to solidify and strengthen the ability of the government to deal with WaSH related issues. Their assistance has helped with the establishment of the 2015-2030 WaSH policy (for further details see Appendix III), and their continued engagement in WaSH seeks to ensure that they have the capacity to actualise the targets they wish to achieve, particularly in relation to facilitating access to

these services in schools and health centres. The work of the EU and UNICEF in seeking to improve access to WaSH services will be important, working not only as donors, but as key advisors, using their expertise in order to increase awareness of the centrality of WaSH services to experiencing good quality of life for all those living in PNG.

This chapter has illustrated that the government of PNG is seeking to address the issues related to WaSH by facilitating improved access to WaSH services. However, only time will tell if the government has the capacity to meet the ambitious targets of the WaSH policy. PNG struggled to achieve the targets of the MDGs, with little improvements to living conditions, and today that the issues relating to WaSH are great. In the new WaSH policy the government is seeking to reduce WaSH related disease, with the intent of seeing an increased overall well being experienced by its citizens. Further, in recognising that health and education are impacted by WaSH, the EU and UNICEF have sought collaborate in order to remedy a lack of access to WaSH services in vital human services, focusing on facilitating improvements being made to ensure increased access and awareness of WaSH services in schools and health care centres. This has worked in alignment with the 2015-2030 WaSH Policy.

This chapter has sought to illustrate the fact that when the quality of WaSH services is good, nations see thriving communities, with positive health outcomes, however where the provision of WaSH services is limited, communities suffer from worsened poverty, high rates of disease, all of which impacts the quality of life experienced by villagers. PNG is a clear example of this, struggling with a majority of its citizens living in poverty and living either with, or at risk of diseases from cholera to diarrhea, which results in unnecessary death and more hardship. All of this inhibits the ability of the people of PNG to experience a good quality of life.

CONCLUSION

This thesis has sought to understand the implications of a lack of access to WaSH services on the quality of life experienced in PNG. From the outset this thesis endeavoured to understand this through considering health and poverty in PNG, addressing the fact that yes, a lack of clean water and sanitation services will impede on the ability of the people of PNG to earn a livelihood and experience good health. In doing this, this thesis first framed the situation relating to WaSH not only as it affects PNG, but briefly in a global context too, this illustrated the extent to which not only PNG but the global community suffers as consequence of an inability to access WaSH services. In this it was understood that within this thesis PNG would represent a microcosm for the state of WaSH globally; using it as a case study to illustrate the extent to which quality of life is restricted as consequence of insufficient WaSH services.

This thesis has intended to show that WaSH has an impact on the ability of individuals to lead a life of quality. In using PNG as a case study this research has illustrated the fact that in developing the WaSH sector there will be improvements to the healthcare outcomes and the alleviation of poverty, resulting in better quality of life experienced by the people of PNG. Though this research recognised that WaSH is a tremendous issue, having a great impact on more than quality of life and on areas external to PNG, there were limitations in the ability to conduct further research while keeping within the scope of this research. In being

selective this research provided a report that effectively covers the matter of WaSH before translating it to the case of PNG.

Great attention was paid to the concepts of sustainable development, capabilities approaches, the HRBA, as well as the role of donors within development. It must be understood the HRBA and the role of donors as being methods of implementation when undertaking projects of development, utilising them in this case to understand whether the work undertaken in the WaSH policy and in the efforts of the EU in PNG is conducive to improving quality of life through consideration of human rights and further whether they promote accountability and effectively monitor the reach of projects. This research also sought to give greater light to sustainable and capabilities approaches to development, understanding that these concepts provide a lens in which it is possible to measure whether WaSH is being understood in terms of its ability to give greater freedom and choice to the people of PNG, and whether consideration of WaSH is done in a way that seeks to balance the social, economic and environmental needs associated with WaSH.

Looking deeper into WaSH in PNG, this research sought to create links between a lack of water and sanitation, as well as poor hygiene practices on poor health outcomes and poverty. In this, it was seen that WaSH leads to a reduced ability to earn a livelihood as a result of insufficient resources to foster crop production, time spent collecting water instead of generating an income, as well as WaSH related illnesses rendering people incapable of work. It also became evident that poor access to WaSH services results in diarrhea and the resurgence of diseases like cholera.

Though controversial, this research used concepts that sought to measure development in terms of the ability of individuals to have their basic needs met as opposed to the ability of individuals to experience economic growth. Within this the capabilities approach as conceived by Sen and Nussbaum held central the need to establish conditions conducive to allowing individuals to work to achieve their own ends. This worked in alignment with the

HRBA in which it was understood that people should be treated as actors that are capable of pursuing their own growth, and not just passive beneficiaries of development programmes. Further, the capabilities approach considered quality of life as being concerned with what people are able to do with the resources at their disposal. Based on this it could be said that in PNG where most are unable to access the basics of life - one of which is water, people do not have the ability to live a life of well being, as they are unable to have their basic needs met as they are unable to secure access to a reliable source of water.

This research then considered sustainable development through the Brundtland Report and the SDGs (for further details see Appendix I). It became clear that development efforts ought to centre around the ability to provide the resources that would enable all persons to live a life of quality. Again, this research focused on the importance of WaSH services as a tool that enables quality of life. This thesis considered access to WaSH as integral to not only SDG 6 (for further details see Appendix II), but the other SDGs, citing links between water and health. In looking at this it was clear that sustainable development has been a core element of development discourse over the last thirty years, showing that although as a concept it is still disputed, there is a general understanding that it is important to consider as we seek to grow as a global community. This was evident when seeing the notion of sustainable development incorporated in the MDGs and SDGs. The SDGs perceives water as integral to human development, allowing people to live a life of dignity.

This thesis has also sought to understand the contributions of the EU and its various institutions in international development, as related to their work in the Pacific region and PNG. It was important to consider how the EU has increasingly sought to incorporate the SDGs (for further details see Appendix I) and sustainable development more generally into their work within the international community. The new Consensus on Development best illustrated this, orienting itself on the need to eradicate poverty through reducing the number of people living in states of deprivation where they are unable to access the resources

needed to have their basic needs met. The work of the EU allowed for consideration of the role of the donor within development, and the use of rights based approaches to development. In this the EU could be seen as a major funder of development efforts where they took aspects of the HRBA where they work to not only provide financial support to developing countries, but to increase the capacity of those working within the field of development, as well as governments so that they may take greater control over the development of their countries. This thesis focused on the EU as a body of various institutions working to facilitate global development efforts that enabled growth that took place in alignment with the SDGs. It looked at how the EU operates in the Pacific region, seeking to finance development efforts that see the Pacific as a partner to the EU and not just a recipient of aid, this is in alignment with the HRBA and capabilities approaches to development which consider those receiving assistance as powerful actors for their own development.

The EU has increasingly aspired to act on the world stage as a promoter of the common good, seeking to address the causes of poverty, assisting developing countries (European Commission: 2017. Pg. 4) so to bridge the gap between developed and developing countries. In doing this the EU has endeavoured to implement the 2030 Agenda into its discussions with other nations and actors, seeking to engage with developing countries, supporting them in adopting policies that work towards the achievement of the targets of the SDGs (for further details see Appendix I). This has taken the fore in the work between the EU and PNG with recent efforts being focused on the implementation of the 2015-2030 WaSH policy (for further details see Appendix III).

This thesis has illustrated that the EU is an important actor as a donor within development. It has sought to portray the complexity of undertaking work at the international level, and show how the concepts of development and HRBA fit into how they operate as a donor. It has further shown the implications of WaSH on the state of health and poverty in PNG by looking

into the 2015-2030 WaSH policy as the key document that set forth the priorities of PNG in regards to WaSH, and further their efforts to implement the targets and goals of the SDGs. This will require the continued focus on the SDGs in PNG, the role of the EU in promoting the national implementation of these goals, and the fundamentality of WaSH in improving the state of health and poverty in PNG.

Having set the scene for development in the international arena, this thesis then considered WaSH as related to PNG. It then sought to understand how the government of PNG is seeking to address the plethora of issues related to WaSH within the country through the 2015-2030 WaSH policy (for further details see Appendix III). In this it was understood that PNG has created national targets to be met by 2030, ones closely related to SDG 6 (for further details see Appendix II). The enormity of meeting this task is clear, given PNG's struggles so far in facilitating improved access to WaSH services, particularly in rural areas. However this is where the role of NGOs and donor bodies is integral. In this, partnerships between bodies can be perceived as vital. This chapter took the case of the EU-UNICEF's WaSH in Schools programme as an example of development efforts focused on facilitating improved access to WaSH services in PNG. This partnership worked towards meeting the targets of the government of PNG's WaSH policy of achieving complete access to WaSH services in schools and health care centres across PNG by 2030. Though both the policy and WaSH in Schools project are new cases, they portray a willingness of actors to work to improve living conditions in PNG, focusing on improving access to vital services (that of water and sanitation) in vital facilities (schools and health care centres). The focus on this perhaps best illustrates the fundamentality of WaSH in our ability to lead a life of quality. In understanding that without WaSH people are unable to receive proper medical care or attend school, showing limitations in the ability to live a life of well being. This is as health care and education are the very basics of life, with literacy and nutrition being central to our ability to improve our own lives.

It is clear that PNG has tremendous challenges ahead of them in improving access to WaSH services in order to achieve better quality of life for its citizens, and ultimately only time will tell whether or not the government of PNG's 2015-2030 WaSH policy has its intended effect, the reduction of people living without access to WaSH services. In spite of the challenge, this thesis hopes that with the assistance of donors like the EU there is at very least considerable headway in meeting these targets by 2030.

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APPENDICES

APPENDIX I: The SDGs and their Targets as related to Water

Goal 1 - Eradicate Poverty.

Targets include: ensuring all people have equal access to natural resources and increase the ability of individuals to withstand and minimise the extent to which they are impacted by climatic events.

Goal 2 - End hunger.

Targets include: By 2030 ensuring that those working in agriculture are better able to deal with the effects of drought and flooding on food production.

Goal 3 - Achieve better health and increased well being.

Targets include: Eradicating outbreaks of water-borne disease and reduce death caused by water pollution.

Goal 4 - Ensure education of a high standard.

Goal 5 - Achieve gender equality.

Goal 6 - Secure safe and reliable access to safe water for all persons by 2030.

(discussed in Appendix II).

Goal 7 - More affordable, cleaner energy.

Goal 8 - Better work opportunities and economic growth.

Goal 9 - Construction of stronger infrastructure, increased innovation and more sustainable industries.

Goal 10 - Reduced prejudice.

Goal 11 - Promotion of sustainable cities.

Targets include: By 2030 minimise the impact of waste management from cities on the environment and reduce the impacts of climate change.

Goal 12 - Producing and consuming sustainably.

Targets include: by 2030 resources will be better managed and used, reduction of waste into water systems so to improve quality of life and advocate for sustainable use of resources within the community.

Goal 13 - Immediate action to deal with the effects of climate change.

Targets include: Increasing the capacity of communities to deal with natural disaster.

Goal 14 - Efficient use and protection of marine life and resources.

Targets include: By 2020 there will be efforts made to protect and restore water systems.

Goal 15 - Efficient use of land resources - mitigate against desertification, the impacts of degraded land and loss of biodiversity.

Targets include: Protect, rejuvenate and ensure better use of water resources and eradicate pests from infiltrating water resources

Goal 16 - Advocate for peaceful communities.

Goal 17 - Increased collaboration in order to achieve the SDGs.

Targets include: increased collaboration of actors from different backgrounds (private sector, NGOs, government) so to share knowledge in order to achieve SDGs and create policy that provides clear targets for achieving sustainable development.

(Source: UN: 2017).

APPENDIX II: Targets and Indicators for SDG 6

The Goal: To secure safe and reliable access to safe water for all persons by 2030.

Targets:

6.1 - Ensure equal and complete access to reliable and reasonably priced water for all people by 2030.

6.2 - To provide sufficient sanitation and hygiene services for all, paying special attention to the practice of open defecation and female hygiene.

6.3 - Reduce instances of pollution and untreated wastewater (by half), focusing on increasing the recycling of water and thus improve water quality.

6.4 - More efficient use of water by 2030, focusing on making sure that all sectors withdraw water responsibly in order to minimise the number of people living with water scarcity.

6.5 - By 2030 ensure that there are cohesive water management systems in place, increasing cooperation between states when necessary.

6.6 - By 2020 actions will have been taken to ensure that natural water sources (e.g. lakes) will be rejuvenated and protected.

6 A - By 2030 increase cooperation at the international level in order to assist developing countries in improving WaSH conditions.

6 B - Create conditions that are inclusive and promote community engagement in the management of WaSH services.

Indicators:

6.1.1 - Number of people accessing secure and reliable water.

6.2.1 - Number of people using better managed sanitary services, including soap for the practice of hand washing.

6.3.1 - Instances of treated wastewater.

6.3.2 - Number of water bodies with fair quantities of water in the immediate surrounding area.

6.4.1 - Change in behaviour towards water use in time.

6.4.2 - Cases of water stress reduced, as established by withdrawals against the available water resources.

6.5.1 - Number of water resource management implemented.

6.5.2 - Numbers of across border cooperation in regards to water management.

6.6.1 - Change in natural water sources over time.

6.A.1 - Amount of development assistance provided to WaSH programmes, as part of government organised spending plans.

6.B.1 - Number of local services with entrenched and operational plans for community involvement in WaSH related issues.

(United Nations Sustainable Development Platform: 2016).

APPENDIX III: Targets and Indicators for the 2015-2030 WaSH Policy of PNG

The overarching aim of the 2015-2030 WaSH Policy (for further details see Appendix III) is that the government of PNG will provide its citizens with equal access to reliable, safe and sustainable water and sanitation services as well as advocate for behaviour changes so to ensure that better hygiene practices take place within homes, villages and areas that thus far have not been the target of government provided WaSH services (these being rural and peri-urban regions).

All targets are intended to be achieved by 2030.

For Water:

70% of those living in rural communities and 95% of those living in urban inhabitants will have access to a reliable, easily accessible and safe water.

For educational and medical facilities the target is 100% coverage of safe water.

For Sanitation:

70% of those residing in rural communities and 85% of those living in urban areas will have access to safe, reliable and easily accessible sanitation services.

Again, every educational and medical facility in PNG will have 100% access to sanitary services.

For Hygiene:

All educational and medical facilities in PNG will have soap, water and facilities to allow hand washing to take place.

All homes will have access to a better water supply so that they may have the ability to practice 'total' sanitation.

(Department of National Planning and Monitoring: 2015. Pgs. 8-9).